


THE MANSFIELD STATE COLLEGE ACADEMIC BULLETIN

1978-1980

mansfield
MANSFIELD STATE COLLEGE





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**THE
ACADEMIC BULLETIN
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**MANSFIELD STATE COLLEGE
MANSFIELD, PENNSYLVANIA 16933**

Mansfield State College is committed to assuring equal opportunity to all persons regardless of race, sex, handicap, or other legally protected classification. This policy is placed in this document in accordance with state and federal laws including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. Please direct equal opportunity inquiries to the Affirmative Action Office, 117 Alumni Hall.

Announcements in this Bulletin concerning regulations, fees, curricula, or other matters are subject to change without notice.

ACCREDITATION

Mansfield State College is accredited by:
The Middle States Association of Colleges and Secondary Schools
The National Council for Accreditation of Teacher Education
The National Association of Schools of Music

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GOVERNING BOARDS

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ACADEMIC AFFAIRS

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Special Programs Counselors	William S. Chabala
	Tondelaya Baylor
	Celeste B. Sexauer
Special Programs Reading Specialist	Mildred M. Miller
Director of Educational Field Experiences	Ronald E. Remy
Director of Audio-Visual Center	

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Assistant Director of Residence Life	Richard E. Kincaid
Assistant Director of Residence Life	Carol L. Kay
Assistant Director of Residence Life	James G. Smart
Assistant Director of Residence Life	Linda F. Friedland
Director of Career Planning and Placement	Thomas J. Costello
Assistant Director of Career Planning and Placement	
Director of Financial Aid	Francis J. Kollar
Assistant Director of Financial Aid	Esther C. Roberts
Director of Counseling Center	Enrico A. Serine
Counseling Center Counselors	W. Michael Johnson
	Sterling Salter
	Susan Krieger
Dean of Admissions	J. David Stearns
Admissions Counselors	Patricia A. Halton
	Joseph A. Bottiglieri
Director of Student Activities	Clarence J. Crisp
Director of Athletics	Henry A. Shaw
Director of Recreation	A. Hugh Schintzius
Supervisor of Infirmary	Margaret G. Jones

ACADEMIC CALENDAR 1978-79

FALL SEMESTER 1978

Faculty Orientation	September 1
Registration	September 5
Check-in, Classes begin	September 6
Last day to add classes	September 20
Pre-registration for spring semester	October 18-November 17
Mid semester grades due	October 27
Last day to drop classes	November 8
Thanksgiving break	November 23-26
Classes resume	November 27
Special class schedule, Final exams	December 16-20
Last day of classes	December 20
Semester grades due	December 21

SPRING SEMESTER 1979

Registration	January 22
Check-in, Classes begin	January 23
Last day to add classes	February 7
Pre-registration for fall semester	March 15-April 19
Mid semester grades due	March 14
Last day to drop classes	April 4
Spring break	April 7-16
Classes resume	April 17
Special class schedule, Final exams	May 14-17
Last day of classes	May 17
Commencement	May 19
Semester grades due	May 21
Alumni Weekend	June 23-24

Issued by the Office of Academic Affairs
November 1977

CLASS SCHEDULE 1978-79

FALL, 1978

Regular Class Meetings

8	M-W-F
9	M-W-F
10	M-W-F
11	M-W-F
12	M-W-F
1	M-W-F
2	M-W-F
3	M-W-F
4	M-W-F
5	M-W-F
8	T-Th
9:30	T-Th
11	T-Th
2	T-Th
3:30	T-Th
5	T-Th

Final Class/Examination Meeting

Monday, December 18	8-9:50
Wednesday, December 20	8-9:50
Monday, December 18	10-11:50
Wednesday, December 20	10-11:50
Monday, December 18	1-2:50
Wednesday, December 20	1-2:50
Monday, December 18	3-4:50
Wednesday, December 20	3-4:50
Saturday, December 16	3-4:50
Tuesday, December 19	3-4:50
Saturday, December 16	8-9:50
Tuesday, December 19	8-9:50
Saturday, December 16	10-11:50
Tuesday, December 19	10-11:50
Saturday, December 16	1-2:50
Tuesday, December 19	1-2:50

SPRING, 1979

Regular Class Meetings

8	M-W-F
9	M-W-F
10	M-W-F
11	M-W-F
12	M-W-F
1	M-W-F
2	M-W-F
3	M-W-F
4	M-W-F
5	M-W-F
8	T-Th
9:30	T-Th
11	T-Th
2	T-Th
3:30	T-Th
5	T-Th

Final Class/Examination Meeting

Tuesday, May 15	8-9:50
Thursday, May 17	8-9:50
Tuesday, May 15	10-11:50
Thursday, May 17	10-11:50
Tuesday, May 15	1-2:50
Thursday, May 17	1-2:50
Tuesday, May 15	3-4:50
Thursday, May 17	3-4:50
Monday, May 14	3-4:50
Wednesday, May 16	3-4:50
Monday, May 14	8-9:50
Wednesday, May 16	8-9:50
Monday, May 14	10-11:50
Wednesday, May 16	10-11:50
Monday, May 14	1-2:50
Wednesday, May 16	1-2:50

LOCATION AND CAMPUS SETTING

Mansfield State College, one of 14 state owned institutions of higher education, was founded in 1857. Mansfield, Pennsylvania is located at the junction of U.S. Routes 6 and 15, fifty miles north of Williamsport and thirty miles from Corning and Elmira, New York.

The 175 acre campus rambles up a lovely hill at the edge of Mansfield, a small residential borough surrounded by rural scenery. Because the view from virtually any point on the campus includes a breathtaking sweep of timbered mountains interspersed with quiet farmlands, members of the College Community tend to consider the whole Tioga River Valley part of the campus.

Trout streams, hunting grounds, ski slopes, camping areas, snowmobiling, and hiking are all available within an hour's drive at such places as Pine Creek Gorge, Hill's Creek State Park, Tioga-Hammond Dams, Denton Hill, Oregon Hill, and the New York Finger Lakes Region.

COLLEGE LIBRARIES

The College Libraries aim to provide students and faculty with a well-selected and representative collection of materials in all fields of study. The Libraries contain more than 180,000 volumes and over 470,000 microforms. Serial subscriptions number 2,340. Approximately 14,000 audio-visual materials are also held. Since 1968 the Libraries have been a selective depository for U.S. Government Documents.

Most of the Libraries' collections are in the Main Library located on the upper two floors of Alumni Hall. This facility can accommodate 350 readers in a variety of seating-lounge furniture, study carrels, tables and chairs. Subject-specialist librarians are available to help individual users as well as provide group instructional experiences.

Branch libraries are located in the Butler and Retan Centers. Butler Center has the music collection and related materials, including over 7,000 phonograph records and cassettes. The latter are accessible to users through stereo listening systems.

Retan Center houses all education materials, including the E.R.I.C. Collection. Also included is a curriculum materials collection representative of the books, curriculum guides, cartridge sound films, cassettes and other materials used in elementary and secondary schools. Users may preview all audio-visual materials on a variety of instructional devices.

The Libraries are actively involved in the shared acquisition and use of materials on both regional and state levels. Specialized materials not available in their collections may be borrowed from other libraries. An in-house computer terminal is used to provide information regarding country-wide locations of materials and a teletypewriter is used to speed inquiries through the interlibrary loan networks.

SUMMER SESSIONS

The Summer School sessions provide opportunities for students to satisfy a wide range of educational needs. Individual workshops are interspersed throughout each session. Course work may be taken for any one of several purposes: acceleration or advanced standing, certification requirements, or transfer work. The present program consists of undergraduate and graduate courses which meet degree requirements in all program areas offered by the College.

CONTINUING EDUCATION

The Continuing Education Program at Mansfield State College was created for the purpose of extending college services and facilities to all adult residents of the rural Northern Tier Region of Pennsylvania. Faculty from each of the academic departments cooperate with the Division by assisting with the selection of appropriate educational activities and by teaching. In addition, surveys are conducted each semester to determine the types of services desired by the area residents.

At Mansfield State College, courses and services are available to all Northern Tier citizens of Lycoming, Tioga, Sullivan, Bradford, Potter and parts of McKean and Cameron counties. The College Educational Delivery System also provides consultant, research, and computer services to schools, community agencies, governmental agencies, business establishments, industrial firms, professional groups, and individual citizens. Groups which want to utilize campus facilities for conferences or workshops can arrange such events by contacting the Office of the Division of Continuing Education.

Admission to the College is not required for any courses offered in the Mansfield Continuing Education Program, though all students wishing admission in a degree program must be approved by the Admissions Office and, if applicable, the Graduate Office before their official admission. Non-admitted students may register for undergraduate credit courses as "special students" in most general studies classes. For graduate credit, "special students" are required to hold an undergraduate degree from an approved four year college.

EQUAL EDUCATION OPPORTUNITY PROGRAM

The Equal Education Opportunity Program at Mansfield consists of two similar programs: the Act 101 Program and the Academic Opportunity Program. The Act 101 Program is a state-financed program to help students who might not otherwise be able to attend or to succeed in college. The Academic Opportunity Program is similar but supported by the College.

Both programs are designed to assist individuals with potential for success in college and future leadership roles but who would not qualify for regular admission. Under Act 101 financial aid based on need is emphasized and students must demonstrate financial eligibility. Both programs provide support services such as tutoring, professional counseling and academic advisement. After two years in the program students are expected to continue as regular students.

DEGREE PROGRAMS OFFERED

MAJOR	A.S.	B.S.	B.S.E.	B.A.	B.M.	GRAD
Art						
Education			x			x
Studio Art				x		
Art History				x		
Biology			x	x		
Business Administration		x				
Chemistry		x	x			
Communication			x			
Criminal Justice Administration				x		
Earth and Space Science			x			
Elementary Education			x			x
English			x	x		x
Fish Culture	x					
French			x	x		
General Studies				x		
Geography				x		
German			x	x		
History				x		x
Home Economics						
Child and Family		x				
Clothing and Textiles		x				
Education		x				x
Food Service		x				
Information Processing		x				
Mathematics			x	x		x
Medical Technology		x				
Music				x	x	x
Music Education			x			x
Music Therapy					x	
Philosophy				x		
Physics			x	x		
Physics/Math			x			
Political Science				x		
Psychology				x		x
Psychology/Human Relations				x		
Public School Nursing			x			
Respiratory Therapy	x					
Social Studies Comprehensive			x			x
Sociology/Social Work		x		x		
Spanish			x	x		
Speech				x		
Special Education			x			x
Theatre				x		
X-Ray Technology	x					

ADMISSIONS PROCEDURE

Requirements for Admission

1. General scholarship as demonstrated by:
 - a. graduation from an approved secondary school or equivalent preparation as determined by the Credentials Evaluation Division of the Pennsylvania Department of Education.
 - b. a satisfactory score of 800 or better in the Scholastic Aptitude Test of the College Entrance Examination Board or 19 or better on A.C.T.
2. Satisfactory recommendation as to the student's character, personality traits, attitudes and interests (from the high school principal, guidance director or other school official acquainted with the student).
3. Class rank in the upper three-fifths of the graduating class.

Completion of the following secondary school work is recommended as minimum preparation:

English	3 credits
History or Social Studies	2 credits
Laboratory Science	2 credits
Algebra and/or plane geometry	2 credits
Foreign Language	2 credits
Electives	5 credits
16 TOTAL	

When a student has been granted admission and fails to enroll, his acceptance for admission will be valid for no more than two years following the month for which admission was granted. After two years such students must reapply for admission as a new applicant and meet the standards for acceptance current at the time of reapplication.

The College reserves the right to establish or change admission standards as it deems necessary.

Mansfield State College offers an Equal Education Opportunity Program designed for individuals who do not qualify for regular admission, but who demonstrate a potential for success in college. This program offers assistance through supportive services to students. A personal interview is required for consideration into the program.

All applications for admission should be made to the Dean of Admissions, Mansfield State College, Mansfield, Pennsylvania, 16933.

APPLICATION PROCEDURES (FRESHMEN)

1. Return the application form with a ten-dollar non-refundable application fee. Applicants will be accepted beginning July 1 following the junior year of high school.
2. Submit an official high school transcript. Your high school counselor can send us a xerox copy of your official transcript or he/she may use the secondary school transcript form attached to the Mansfield State College application.
3. S.A.T. scores or A.C.T. scores should be forwarded to the Admissions Office.

IF ACCEPTED FOR ADMISSION, THE APPLICANT WILL BE REQUIRED TO SUBMIT A PHYSICAL EXAMINATION REPORT ON THE FORM PROVIDED BY THE COLLEGE.

EARLY DECISION. Consideration for Early Decision for fall entrance will be given to those candidates who meet prescribed requirements in terms of secondary school achievement and junior year S.A.T. scores. Those offered admission through Early Decision will be required to submit scores from a senior year examination of the S.A.T. Applicants who qualify for Early Decision will be notified approximately September 25.

APPLICATION PROCEDURES (TRANSFERS)

1. The applicant should send official transcript(s) from the college(s) previously attended. Transcripts and admission data should be sent to the Dean of Admissions before April 1 for the fall semester or before October 1 for the spring semester.

2. Transfer applicants for the fall semester are notified as early as December 1 prior to the desired enrollment date.
3. If at the time an applicant is approved for transfer to Mansfield State College he is enrolled as a student at another institution, it will be understood that such admission has been granted on a provisional basis only. The student must receive honorable academic and social dismissal before admission will be finalized. Application should be submitted not later than the fourth semester so that admission may be granted for the fifth semester.

Luzerne County Community College and Mansfield State College agree to mutual cooperation in correlating their respective programs for the Associate in Arts or Associate in Science and the Bachelor's degree in Arts or Sciences. Subject to the terms of this agreement, the student who has earned the Associate in Arts or Associate in Science degree at Luzerne County Community College is assured admission to Mansfield State College and advanced standing credit for courses of study completed at Luzerne County Community College. The student who has not completed the Associate in Arts or Associate in Science degree at Luzerne County Community College is entitled to apply for admission to Mansfield State College and for evaluation of his courses for which transfer credit is requested, but he does not enjoy the assurance which this agreement provides for the student who has earned the Associate in Arts degree or the Associate in Science degree. For more detailed information contact the Admissions Office.

Credit will be given for acceptable courses pursued in accredited college institutions. Courses taken by correspondence are not acceptable. Mansfield State College accepts undergraduate credit transferred from approved non-accredited colleges. This credit is subject to validation by one year's successful work after transfer and may then be counted toward undergraduate degree requirements at Mansfield State College.

No student may be granted and receive a degree from this College without a minimum residence of one year. A minimum of thirty-two semester hours of work earned on campus will meet the requirements for one year residence.

Degree candidates who wish to pursue any part of the program of studies for a degree at another institution will be required to secure prior approval from the Office of Academic Affairs.

READMISSION OF FORMER STUDENTS

All former students excepting those in continuing education who have not been in regular attendance during the previous semester must apply for readmission to the college.

An applicant for readmission should request an application form from the Office of Admissions and return it with the ten-dollar non-refundable re-evaluation fee by May 1 for the fall semester or by November 15 for the spring semester. A statement concerning the status of the applicant since withdrawal from the College, including such information as employment, college course work completed, military service, etc., should accompany the application.

CERTIFICATION

Applicants desiring endorsement for teacher certification by Mansfield State College (e.g., B.A. in Biology degree holder seeking certification in Secondary — Biology; B.S. Sec. Ed. holder seeking added certification in Elementary Education) must complete or submit the following if they are not a Mansfield State College graduate.

1. Personal interview with the Dean of Teacher Education.
2. Application form may be obtained from the Office of the Dean of Teacher Education. The application should be completed and returned with a ten dollar application fee.
3. Official transcripts of all college work completed.

Mansfield State College graduates desiring certification should contact the Dean of Admissions for advisement.

SPECIAL STUDENTS

Special students are non-matriculated students who fall into any of the following categories:

1. Continuing Education — in-service teachers working toward permanent certification or courses taken for personal enrichment.
2. High School honor students — high school students in the upper quarter of the academic section who have recommendation from the principal or guidance counselor to take advanced work for college credit.
3. Undergraduate college students — students taking courses at Mansfield State College for transfer to another college.

Special students are exempt from the academic standards required of matriculated students. A maximum of 36 semester hours of

academic work as a special student at Mansfield State College may be accepted into a degree program after formal admission as a matriculated student.

PROJECT AHEAD

The College is a participant in Project AHEAD, Army Help for Education and Development, which enables soldiers to take courses that apply to a degree at M.S.C. upon discharge from the Army.

STUDENT LIFE AND SERVICES

Please write the ADMISSIONS OFFICE, Mansfield State College, Mansfield, PA 16933 for information.

Students on campus, please consult current PASSWORD, the student handbook.

FEES AND CHARGES

(Fees are subject to change without notice)

FEES AND CHARGES

in effect fall, 1978 and spring, 1979

Application Fee	\$10.00
Advance Deposit (1st semester)	\$47.50
	credit on account

TUITION

The basic fee covers registration and the keeping of student records, use of the library, student welfare, health service and laboratory facilities. Fees for courses audited are the same as those taken for credit. The College offers a waiver of tuition to dependents of employees, graduate assistants, and to certain foreign students. Additional information concerning tuition waiver is available through the Revenue Office.

In-State (Per Semester)

Full-time:

Undergraduates

\$475 for 12 to 18 credit hours, then \$39 for each additional credit hour

Graduates

\$475 for 9 to 15 credit hours, then \$51 for each additional credit hour

Part-time:

Undergraduates

\$39 per credit hour for less than 12 credit hours

Graduates

\$51 per credit hour for less than 9 credit hours

Out-of-State (Per Semester)

Full-time:

Undergraduates

\$890 — 12-18 credit hours, then \$71 for each additional credit hour

Graduates

\$890 — 9-15 credit hours, then \$75 for each additional credit hour

Part-time:

Undergraduates

\$71 per credit hour, for less than 12

Graduates

\$75 per credit hour, for less than 9

A student shall be classified as a Pennsylvania resident for tuition purpose if he/she has a Pennsylvania domicile.

Domicile is the place where one intends to and does in fact permanently reside. Because the determination of whether a student intends to reside indefinitely in Pennsylvania is necessarily subjective, documentary evidence, statements from disinterested persons and the presumptions set forth below will be considered.

- Continuous residence in Pennsylvania for a period of twelve months prior to registration as a student at a college or university in the Commonwealth creates a presumption of domicile. Although one is presumed not to be a domiciliary if one has resided for a shorter period before attending a college or university, a student may rebut this presumption by convincing evidence.
- A person attempting to establish domicile must be a citizen or must have indicated by formal action his intention to become a citizen or must have been admitted to the United States on an Immigrant Visa. A tourist or student (non-immigrant) visa is not proof of domiciliary intent.
- A married woman is presumed to have the domicile of her husband, however, such presumptions may be rebutted by convincing evidence of an independent Pennsylvania domicile. A Pennsylvania domiciliary who marries a non-resident shall continue to be classified as a Pennsylvania resident if he/she registers at a college or university within one year of his/her marriage.
- A minor is presumed to have the domicile of his/her parent(s) or guardian. The age of majority in Pennsylvania for establishing a domicile for tuition purposes is twenty-one. However, a minor

may prove emancipation and independent domicile through convincing evidence.

- A United States government employee or a member of the armed forces who was domiciled in Pennsylvania immediately preceding entry into government service and who has continuously maintained Pennsylvania as his/her legal residence, will be presumed to have a Pennsylvania domicile. Others in government service may, by convincing evidence, establish Pennsylvania as their domicile.
- A student receiving a scholarship or grant dependent upon domicile, from a state other than Pennsylvania, is not domiciled in Pennsylvania.

A student may challenge his/her residency classification by filing a written petition with the Director of Budgets and Accounts.

If the student is not satisfied with the decision made by the Director of Budgets and Accounts in response to the challenge, the student may take a written appeal to the office of the Secretary of Education, Education Building, Harrisburg, Pennsylvania. His decision on the challenge shall be final.

Any reclassification resulting from a student's challenge shall be effective for tuition purposes as of the date such challenge was filed.

A student who changes his domicile from Pennsylvania to another state must promptly give written notice to the college or university.

HOUSING

Advance Room Deposit	\$ 50.00
	credit on account
Room and Board	\$554.00
Board only	\$248.00
Private room (if available)	\$146.00
	extra per semester

Includes CENTREX telephone service (does not include toll charges). Linens and pillows are not provided.

All Residence Hall students are required to participate in the Food Service Program at Mansfield State College, except where medical waivers are obtained. Students requiring a special diet for health reasons must obtain a copy of the diet and an excuse from an attending physician and submit both to the Dean of Students Office for approval. If the Food Service is unable to furnish the diet, the student will be granted a Dining Fee Waiver. Student teachers and interns may also request this waiver from the Dean of Students Office.

COMMUNITY BUILDING FEE

Undergraduates	
1 to 6 credits	\$ 2.50
7 to 11 credits	\$ 5.00
12 or more credits	\$10.00
Graduates	
1 to 6 credits	\$ 2.50
7 or 8 credits	\$ 5.00
9 or more credits	\$10.00

LATE REGISTRATION FEE \$10.00

Charged of students who register after the date officially set for registration. The same regulation shall apply to approved deferred payments.

TESTING AND COUNSELING FEE

One time: 1st semester \$10.00

DEGREE FEE \$ 5.00

TRANSCRIPT FEE \$ 1.00

A student may be issued one free unofficial transcript each semester while in attendance at Mansfield State College. After the first transcript has been issued, a charge of \$1.00 is made for each additional transcript.

When not enrolled one free transcript will be provided with the same charge of \$1.00 for each additional transcript.

CERTIFICATION FEE \$15.00

Charged prior to graduation for a Pennsylvania Teaching Certificate.

DAMAGE FEE (non-refundable) \$ 2.00

MISCELLANEOUS

Music Instruction Fee (graduate students and non-music majors) (per credit) \$45.00
 Music Lesson Fee (undergraduate music majors) (per semester) \$45.00
 Credits by Examination (per examination) \$25.00
 Med-Tech Fee \$25.00

Administrative fee charged to students in the clinical period of the Med-Tech program in lieu of tuition payments.

ABOVE FEES PAYABLE TO THE COMMONWEALTH OF PENNSYLVANIA.

STUDENT ACTIVITY FEE

Part-time Undergraduate (7 to 11 crs.) \$20.00
 (optional 1-6)

Full-time Undergraduate (12 or more crs.) \$40.00
 Graduates optional at same rates.

All Undergraduate-Commonwealth Association of Students (CAS) \$1.00

ABOVE FEES PAYABLE TO COLLEGE COMMUNITY SERVICES, INC.

REFUND POLICY

Partial refunds of tuition will be made according to the following schedule only when:

- A student voluntarily withdraws from college because of personal illness, certified by an attending physician, or because of such other reasons as may be approved by the Vice President of Student Affairs.
- In the case of part-time Pennsylvania or out-of-state students dropping credit hours.
- Full-time Pennsylvania residents, undergraduate students reducing their academic program below 12 credit hours. (Schedule changes must be approved by the Office of Academic Affairs.)

	Tuition Refund:	Room Refund:
1st Week	80%	80%
2nd Week	80%	80%
3rd Week	70%	70%
4th Week	60%	60%
5th Week	50%	50%
6th Week	None	None
7th Week	None	None

Dining will be charged at the rate of \$15.50 per week for

the period used. A student using dining on Sunday will be liable for payment for the entire week. No refund is made for fees other than tuition, room and board as outlined above.

- In the case of full-time students reducing credits over the basic fee.

FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE

INFIRMARY CHARGES

The services of the College's physician and nurses are available to those who are ill or injured. The cost of medicines and dressings for minor ills or injuries is included in the basic fee as previously explained; however, students must pay for special prescriptions or preventive vaccines. In addition, day students in the infirmary without dining privileges will be charged for the cost of meals.

DELINQUENT ACCOUNTS

Students will not be permitted to receive grades, to enroll for any semester, to receive a degree, or to have honored a request for a transcript of records until all overdue accounts have been paid. Students withdrawing from the College during a semester will be required to receive clearance of all accounts from the Revenue Office.

SUMMARY OF TYPICAL UNDERGRADUATE EXPENSES PER SEMESTER

	IN-STATE	
	DORMITORY	COMMUTER
Tuition (Full time)	\$ 475.00	\$ 475.00
Room and Board	554.00	
Building Fee	10.00	10.00
Activity Fee	40.00	40.00
CAS Fee	1.00	1.00
Damage Fee	2.00	2.00
Testing & Counseling (First Semester Only)	10.00	10.00
Books and Supplies	<u>80.00</u>	<u>80.00</u>
	\$1,172.00	\$ 618.00
	OUT-OF-STATE	
	DORMITORY	COMMUTER
Tuition (Assumes Full-time)	\$ 890.00	\$ 890.00
Room and Board	554.00	
Building Fee	10.00	10.00
Activity Fee	40.00	40.00
CAS Fee	1.00	1.00
Damage Fee	2.00	2.00
Testing & Counseling (First Semester Only)	10.00	10.00
Books and Supplies	<u>80.00</u>	<u>80.00</u>
	\$1,587.00	\$1,033.00

ACADEMIC POLICIES AND REGULATIONS

ACADEMIC POLICIES

GRADUATION REQUIREMENTS

To graduate from Mansfield State College with a baccalaureate degree a student must (1) pass at least 128 credit hours, (2) earn at least a 2.00 quality point average in all work attempted and in the major, and (3) complete the requirements for general education and for the major. To graduate with an associate degree a student needs to pass at least sixty-four (64) credit hours.

No student may be granted and receive a baccalaureate degree from the College without a minimum residence of one year. A minimum of thirty-two (32) semester hours of work earned on campus will meet the requirement for one year residence. For the associate degree at least fifteen (15) credits must be taken from Mansfield State College.

The minimum residency requirement usually means that the senior year is taken at the College; exceptions may be made with the approval of the Office of Academic Affairs. No more than sixty-seven (67) credits from a two year junior or community college will be accepted as transfer credit toward a baccalaureate degree.

GRADUATION OUTLOOK FORM

In order to avoid problems arising from unmet graduation requirements a Graduation Outlook Form will be completed by the Registrar's Office. This form will be provided the student prior to registration for the final thirty-two (32) semester hours of earned credit, or prior to the student's seventh regular semester. Students who are accelerating may request a Graduation Outlook earlier.

The Outlook Form lists the courses the student is taking during the current semester and notes the courses and/or requirements still necessary to be completed for graduation, as well as any deficiency in Q.P.A. A copy of the completed form is sent to the student, and his/her department chairperson. However, it is the student's responsibility to review the form for possible discrepancies.

SCHOLASTIC STANDARDS AND REQUIREMENTS

MARKING AND POINT SYSTEM. Mansfield State College employs the 4-point system, as shown below, in evaluating academic performance.

Grade	Interpretation	Quality Points
A	Excellent	4
B	Above Average	3
C	Good College Work	2
D	Passing	1
F	Failure	0

Instructors may correlate percentage scores with letter grades. For such correlation the following list of equivalents is presented.

90 - 100 = A
80 - 89 = B
70 - 79 = C
60 - 69 = D
0 - 59 = F

In addition to letter grades, the following designations (none of which is figured in the Q.P.A.) are used in situations warranting them:

I - Incomplete
S - Satisfactory
U - Unsatisfactory

EX - Credit by Examination

W - Withdrew from the course after the drop-add period with the approval of the instructor, the department chairperson, and the Registrar.

AU - Audited
PF - Pass-Fail

- Denotes a Continuing Education course

The academic standing of each student in every subject is reported at the close of the semester. All regular matriculating students seeking an undergraduate degree must meet the established academic standards of the institution.

The student's quality point average (Q.P.A.) is determined by dividing the total number of quality points earned by the total number of semester hours of work attempted. It should be noted that

semester hours and credit hours are one and the same. The Q.P.A. is the index by which a student's academic standing is judged.

REPEATING GRADES

An "F" grade in a required course must be cleared by repeating the course. Once a failed course has been repeated both grades remain on the student's record and both are used in computing the student's quality point average.

For students who have taken NO previous courses at M.S.C. and enter the College in June, 1975, or thereafter, the following policy applies. If a student repeats a course which cannot be repeated for credit then 1.) all grades received shall be included on the student's transcript, but 2.) only the last grade received shall be used in computing the student's quality point average.

Note: Any course may be repeated, not solely courses that were failed. However, the last grade is the one that counts. Therefore, should a student repeat a course in which s/he received a "D" and fails the course the second time, the "F" would be used in computing the student's quality point average and the credit earned with the "D" would be erased.

Students who are repeating a course should notify the Registrar's Office.

INCOMPLETE GRADES

An "I" (Incomplete) grade is used to denote unfinished work because of serious mitigating circumstances beyond the student's control. The student is responsible for the removal of an "I" grade within a period of three weeks following the semester in which the "I" grade was given except in cases where further mitigating situations prevail.

Decisions about granting "I" grades will be made by the professor of the course in consultation with the Registrar's Office. An Incomplete is a privilege granted because of circumstances and not a right to be expected by the student. If the "I" grade is not cleared, the Registrar shall record a final grade of "F".

GRADE CHANGES

If an error in computation or transferral requires that a faculty member change the final grade given a student, such a change must be made within the first three weeks of the following semester. No grade changes will be allowed following that time unless a request for an extension, stating the reason for the extension, was made by the faculty member to the Registrar.

CONTINUANCE IN COLLEGE

Students attending Mansfield State College are permitted continued matriculation governed by credits attempted with the corresponding minimum quality point average (Q.P.A.) as required by the outline below.

The grade report issued to students at the end of every marking period serves as the means by which each student is informed of his/her academic standing. Should a student's grade point average be below a cumulative 2.0 he/she will receive a letter of warning from the Academic Affairs Office. The following schedule shall be the minimum requirement for continuation and satisfactory standing at Mansfield State College.

0 - 18 semester hours attempted —
1.00 Q.P.A. or better

19 - 37 semester hours attempted —
1.60 Q.P.A. or better

38 - 56 semester hours attempted —
1.80 Q.P.A. or better

57 or more semester hours attempted —
2.00 Q.P.A. or better

Any student whose quality point average is below the standard set forth above at the end of the fall or spring semester will be dismissed from college.

Transfer students are not subject to academic dismissal until they have completed two semesters at Mansfield State College unless their Q.P.A. at the end of the first semester is less than 1.00. Thereafter transfer students are subject to the same academic standards. For example, a student who is granted eighteen (18) semester

hours of credit in transfer and who is taking fifteen (15) semester hours of work will have attempted a total of thirty-three (33) semester hours at the end of the semester and must earn a Q.P.A. of at least 1.60 to continue.

Readmitted students are subject to the same academic standards.

A one year interval must elapse before a student who has been dismissed for academic deficiency may be readmitted to the College. Students twice dismissed for academic reasons automatically terminate their association with Mansfield State College.

Academic Standards Review Board

Following dismissal notification, a student, upon his own initiative, has recourse to the Academic Standards Review Board if in his/her opinion there would be sufficient reasons upon which to base an appeal for reinstatement before the usual one-year time interval. The Academic Standards Review Board normally meets in June and January.

Procedures — Academic Standards Review Board

- A. Upon dismissal, the student (if he chooses to appeal) requests an appointment for his hearing through the Office of Academic Affairs (normally by calling that office). The Academic Standards Review Board will not hear the appeal of a student who has been dismissed a second time.
- B. After having been notified of the time for the hearing the student is expected to address to the Chairperson of the Review Board a written appeal stating his case. The written appeal may be mailed to the Chairperson or brought in person by the Student to the hearing. In no case, however, will the Board be obligated to decide an appeal if the student has failed to provide the Board with a written statement of his appeal.
- C. After receiving information with regard to the appointed time and place for his hearing, the student is expected to request his/her departmental chairperson and the faculty member of his/her choice to appear before the Board at the appropriate time. The Board will not hear a student who does not have faculty representation.
- D. Before the student discusses his case with the Board, the student's written review will be read by the Board. The voting members of the A.S.R.B. will consider all necessary records of the student. Next the student will be given the opportunity to speak to the A.S.R.B.
- E. Following the presentation of his appeal, the Board members for the case will vote by secret ballot (example: John Doe — granted or denied) and the student will be notified immediately of the Board's decision.
- F. Failure to appear on the part of the student will constitute waiver of the appeal and will result in a finalization of the dismissal. Should the student's chairperson or the faculty member of his/her choice fail to appear, the remaining voting members will have the determining votes. A majority vote of the members will determine the decision on any specific case.
- G. If the student's appeal is denied, he/she may initiate an appeal to the President if he/she has new information to present.

Students in Academic Difficulty

Advisors should confer carefully and often with advisees in academic difficulty. Although the responsibility for awareness of his/her academic situation is the student's, the advisor should assist the student in having a clear understanding of his/her potential for dismissal. Assistance with any questions relative to the Continuance Policy is available from the Assistant Vice President for Academic Affairs.

Since credits, not grades, transfer back to M.S.C., students in academic difficulty cannot raise their average by attending summer school at another institution. Furthermore, it is usually not to the student's advantage to take courses elsewhere because transfer credits raise the student's total number of credits, necessitating a higher Q.P.A. as seen in the aforementioned schema.

COURSE LOAD

A normal academic work load is defined as 12 to 18 semester hours. Any student desiring to carry more than 18 semester hours must obtain permission from his/her department chairperson and

have a 2.60 Q.P.A. for carrying 19 semester hours or a 3.00 Q.P.A. for carrying 20 semester hours.

Students carrying less than 12 semester hours are not eligible to live in campus dormitories without special permission of the Vice President for Student Affairs.

CLASS STANDING

Class standing is determined by the total number of semester hours earned including acceptable credits transferred from other accredited colleges.

Freshman —	0-31 semester hours of earned credit
Sophomore —	32-63 semester hours of earned credit
Junior —	64-95 semester hours of earned credit
Senior —	96 semester hours of earned credit

DEAN'S LIST

The Dean's List is issued at the close of each semester. It includes only undergraduate students. Students must earn at least twelve (12) credits for which a letter grade is received (P/F and S/U grades are excluded). The semester quality point average must be 3.50 or above.

HONORS

Superior scholastic achievement is recognized at Commencement. Such recognition becomes a permanent part of every graduating senior's record, with designations based upon cumulative point average as indicated:

Honors	3.35 to 3.64
High Honors	3.65 to 3.94
Highest Honors	3.95 to 4.00

TRANSFER CREDIT

Following acceptance to the College an evaluation of courses taken at the previous institution is made by the Registrar's Office in consultation with the chairperson of the student's major department.

Credits transferred by students from non-accredited colleges or universities are received on a probationary basis. The student must achieve a 2.0 Q.P.A. after the first two semesters of matriculation as a full-time student (minimum of twenty-four semester hours) in order to validate the award of transfer credits.

Associate in Arts and Associate in Science Degrees

Students entering Mansfield State College with an Associate in Arts degree automatically meet and close General Education requirements. However, any specific courses within General Education which are required by the student's major department must be taken by the transfer student. (Example: Psychology 101 is required under Group V in most majors in the School of Education. If he/she has not already done so, the transfer student with an AA degree must take Psychology 101.)

Only Associate in Arts degrees meet General Education requirements. Course work from two year institutions culminating in all other degrees — Associate in Applied Arts, Associate in Science, etc. — must be evaluated course by course in application to General Education requirements.

Two exceptions to the situation outlined in the previous paragraph are the agreements concluded between M.S.C. and Luzerne County Community College and M.S.C. and Corning Community College.

Students graduating from Luzerne with an Associate in Science degree in Education, General Studies, or Science will meet General Education requirements as long as their program electives correspond with those specified in the agreement between Luzerne and Mansfield. Specified also in the agreement with Luzerne are two definitive statements: an A.S. in Business Administration will be evaluated on a course by course basis; and an A.S. in Mathematics will automatically fulfill General Education. Regarding Corning, students who have graduated with an A.S. in Science degree in Business Administration, General Studies, Humanities — Social Science, or Mathematics Science will meet General Education as long as their program electives correspond with those specified in the agreement between the two institutions.

Students or faculty should check with the Registrar for an exact determination on transfer cases from Luzerne or Corning.

Transfer Evaluation — Grades

- A. No grades or Q.P.A. transfer from the previous institution. Credits transfer but not grades.
- B. Courses in which a transfer student has received a "D" do transfer as credit.

Transfer Evaluation — Credit Hours

- A. The following is intended as a brief explanation of the most common systems — quarter and unit — which are utilized at other institutions. There are others. The system employed by a college will usually be indicated on the student's transcript. Questions should be addressed to the Registrar's Office.

1. Quarter

Courses transferred from institutions utilizing quarter hours must be converted to semester hours to obtain the number of transfer hours. Quarter hours are multiplied times $2/3$; thus a three quarter hour course is equivalent to two semester hours, four quarter hours equal $2\frac{2}{3}$, five quarter hours equals $3\frac{1}{3}$, etc.

While fractions for different courses are not added together to give more credit in, for example Group III, the total number of transfer credits includes the fractions, i.e. the total number of quarter hours accepted in transfer is multiplied times $2/3$ and the result is the total number of semester hours accepted in transfer. Any excess fraction in the total number of transfer credits is discounted.

2. Unit

In a unit system, one unit is usually equal to 3.5 semester hours. Thus, the number of units is multiplied times 3.5. A one unit mathematics course would be equivalent to $3\frac{1}{2}$ semester hours. The treatment of fractional hours is the same as stated for the Quarter hour system in the preceding paragraph.

- B. The number of credit hours that transfer from another institution is the number which is given for completion of the course by the previous institution. For example, some institutions do not give credit for physical education courses. A student transferring to M.S.C. from such an institution would have met the physical education requirement at M.S.C. for as many physical education courses as taken previously but no credit would be given at M.S.C. Similarly an introductory biology course might carry three (3) credits at another institution. The transfer student would bring in three credits for such a course even though Biology 101 at M.S.C. is a four (4) credit course. Furthermore, if a U.S. history course is four credits at the previous institution, the transfer student receives four credits even though U.S. history at M.S.C. is a three credit course.

Maximum Hours Accepted in Transfer

Mansfield State College will not accept in transfer more than sixty-seven (67) semester hours of course work from two-year junior or community colleges. Once M.S.C. has accepted a student with an associate degree for transfer that student may not transfer additional semester hours of course work from two-year junior or community colleges.

Non-Accredited Colleges

Credits transferred from non-accredited colleges or universities are received on a probationary basis. The student must achieve a 2.00 Q.P.A. after the first two semesters of matriculation as a full-time student (minimum of 24 semester hours) in order to validate the award of transfer credits.

PASS-FAIL POLICY

- A. Eight courses may be taken under the pass/fail option over the total four years. A student may take no more than one course for pass/fail each semester.
- B. No 100 or 200 level courses taken in fulfillment of Core of General Education requirements may be taken pass/fail.
- C. Any 100 or 200 level course may be taken for pass/fail but they will count only as a free elective.
- D. Information that any 100 or 200 level course taken pass/fail will count only as a free elective should be included on the pass/fail option card.
- E. Courses required by the major department may only be included in the pass/fail option at the discretion of the department.

- F. Pass grades will be "D" or better and three failures under the option will constitute loss of the option. Pass/fail courses are not reflected in the quality point average of the student, but will be counted as credits earned if a passing grade is received. The student has a two week period at the beginning of the semester to elect to take a course pass/fail. He may not change his pass/fail option to a letter grade or select the pass/fail option after the two week add period has passed.

Any 300 level courses which are approved as courses for Model V may be taken pass/fail in fulfillment of General Education.

CREDIT BY EXAMINATION

A student in good academic standing may request permission to take a comprehensive examination in a particular course offered by the College. All requests for credit by examination must be made to the department chairperson involved and reviewed by the Assistant Vice President for Academic Affairs. A student must present evidence that he is sufficiently competent to warrant the examination.

Students follow the procedures outlined below in order to obtain permission and then to take a course credit by examination. Except under unusual circumstances, the examination must be taken during the first month of the semester.

Courses in the areas of independent study, ensemble or other group participation courses, student teaching or pre-professional experience, seminars or selected topics, and laboratory experience may not be taken credit by examination without approval of the department offering the course and the Office of Academic Affairs.

When a course is passed by examination, the student receives no grade for the course. An EX is recorded on the student's permanent record. If the student fails the course, there is no notation on the record. However, since a failed course may not be attempted by examination a second time, a record of the fact that the student has taken the course by examination is kept in the student's file until graduation.

Procedures for Credit by Examination

- A. Student contacts department chairperson for the department of the course desired to be taken credit by examination and contacts the Assistant Vice President for Academic Affairs.
- B. Concurrently or following the above contact, the student completes a petition explaining the request and rationale and presents petition signed by the above department chairperson to the Assistant Vice President for Academic Affairs.
- C. Authorization to take the specified course credit by examination will be given to the student and must be taken to the Revenue Office where the student pays the \$25.00 fee (subject to change as per directive by the State).
- D. The department chairperson sets the date for the examination and later notifies the Assistant Vice President for Academic Affairs whether the student passed or failed the examination.
- E. If the student passed the course, the Assistant Vice President for Academic Affairs will so notify the Registrar who will record the course and "pass" on the student's semester grade report. The Registrar's Office will then record the course and pass on the student's permanent record.

Students may also take part in the College Level Examination Program (CLEP) by contacting the Counseling Center. Mansfield State College gives credit for the CLEP Subject Examination but at the present time does not give credit for the CLEP General Examinations.

ADVANCED PLACEMENT

Courses taken before admission to college under the Advanced Placement Program conducted by the Educational Testing Service, Princeton, New Jersey, may be applied toward graduation requirements by students who are admitted to college to pursue one or more semester's work. To secure such credit the student must make formal application to the Office of Academic Affairs. The course must satisfy college requirements and the score on the Educational Testing examination must be satisfactory to college officials. Not more than twelve credits earned by such examination may be applied toward graduation requirements.

ADMISSION OF UNDERGRADUATE STUDENTS TO GRADUATE COURSES

An undergraduate student at Mansfield State College may be admitted to a graduate course (500 level) providing the student:

- A. Satisfies the requirements for admission with full graduate standing, except for having the bachelor's degree.
- B. Is within twelve semester hours of having satisfied all of the requirements for the bachelor's degree.
- C. Has the permission of the Dean of Graduate Studies.

The total load of courses, undergraduate and graduate, may not exceed fifteen semester hours.

The graduate course(s) may be applied toward the student's undergraduate total of 128. However, if the graduate credits raise the student's total above 128, the course may count as graduate credit upon conferral of the bachelor's degree. This does not imply automatic admission into the Graduate Division. Admission under these conditions would be on a conditional status.

CREDIT FOR MILITARY SERVICE

Veterans with a minimum of eighteen months of honorable service in the United States Army, Navy, Marine Corps, and Air Force, may apply for credit in HPE 100 (Health) and HPE 101-103 (Physical Education).

ABSENCE POLICY

Regular and punctual class attendance is expected of all students.

Student evaluation expressed as grades will be determined on the basis of academic performance. Professors will outline their criteria for academic evaluation prior to the end of the first week of class.

Bona fide absences because of illness, serious mitigating circumstances, or absences because of official College representation approved by the Office of the Vice President for Student Affairs shall be accepted by all faculty.

Requests for absence from the College must be initiated in the Office of the Vice President for Student Affairs and official notification for excused absences will be issued to the faculty by this office.

ADD, DROP, WITHDRAW FROM A COURSE

A student may withdraw from a course during the first nine weeks of a semester without penalty. After nine weeks a "W" will be recorded on the student's record upon official withdrawal from a course. Course withdrawal after the designated nine-week drop period is permitted with the approval of the Registrar's Office, the instructor of the course, and the student's department chairperson. A statement in writing from the student's medical doctor, counselor, or close family must be approved by the Registrar's Office before a student is permitted to complete withdrawal procedures.

A student may add a course during the first two weeks of the semester.

To drop or add a course during the drop-add period, the student secures the appropriate form from the Registrar's Office or faculty, has the form signed by the instructor of the course and by his/her advisor, and returns the form to the Registrar's Office. No notation of a course dropped will appear on the student's permanent record if he/she withdraws during the designated drop period.

A student will receive an "F" in any course from which he/she withdraws without approval.

CHANGE OF MAJOR OR DIVISION

Requests to change major or division must be initiated in the Office of the student's Dean.

MAINTENANCE OF MATRICULATION

Students, who are teachers-in-service, working toward completion of degree or certification requirements will remain in "continued matriculation" status provided that a minimum of six semester hours of acceptable course work is completed each year. These courses may be taken in residence or as transfer courses.

WITHDRAWAL FROM COLLEGE

Students wishing to withdraw from college must notify the Counseling Center which provides the student with a form, that, when completed, clears the student for formal withdrawal. All financial obligations to the College must be met.

Students wishing to withdraw from the College and erase the semester's work would be instructed by the Counseling Center to date their withdrawal the Friday of the last regular class week (Note: In order for the withdrawal to be effective for the last Friday of regular class week the student must check out of the dormitory on that date). Students wishing to withdraw with the semester's work retained on their record would date their withdrawal the Friday of the last combined week for final exams and classes.

Withdrawal without proper notification and approval may prejudice a student's record and his chance for future readmission. The College reserves the right to record "F" grades for such courses not completed during the semester in which the student has improperly withdrawn.

Students withdrawing with the intention of returning to M.S.C. in a semester or a year may so notify the Office of Academic Affairs which will in turn contact the Admissions Office and the \$10.00 readmission fee will be waived. Such notification must be given at the time of withdrawal and is valid for one calendar year unless the student specifies an exact date of reentry (which may be longer than a calendar year) at the time of withdrawal.

PETITION

When any rule or regulation of the College causes an unfair hardship, the student is entitled to petition for an exception by filing a petition form obtainable from the Office of the student's Dean. Advisors are expected to assist in the preparation of a petition. Completed forms should have the necessary signatures prior to submission to the Office of Academic Affairs.

PERMISSION PROCEDURES TO TAKE COURSES AT ANOTHER INSTITUTION

Matriculated students desiring to take courses at another institution for transfer to M.S.C. must complete a "Dean's Recommendation for Transfer of Credit to M.S.C." form prior to undertaking the courses. The form is available at the Academic Affairs Office, Alumni Hall, Room 103.

If the courses which the student desires to take elsewhere are electives or courses in the student's major, the form is signed by the student's advisor, department chairperson, and academic dean.

If the courses are to meet General Education requirements, the form is signed by the student's advisor, department chairperson, and the Assistant Vice President for Academic Affairs. For courses to be acceptable for General Education group closing, they must be comparable to courses which may be taken for General Education at M.S.C. Since taking courses at another institution as a means to circumvent the College's General Education program is not desirable, courses are carefully scrutinized.

ACADEMIC PROGRAMS

GENERAL EDUCATION

Philosophy of the Program

The General Education Program offers alternative course selections in order to provide the student with courses of study to meet his individual needs, intents, and the basic undergirding requirements for his major. The student bears the responsibility for meeting any specific group requirements as demanded for his eventual major. Faculty advisors are available and willing to assist students in their selection of course work.

While the incoming student may or may not have a future area of study in mind at the time of entrance, he will find that the General Education Program is structured broadly enough to cover most alternative possibilities. Should a student enter the College with a definite major in mind, he would be assigned a departmental advisor in the department of his choice.

If an entering student is not ready to choose a major, he will be designated in the Undeclared category and would be advised by the Advising Center in South Hall. The advisor will assist the student in choosing courses to fulfill General Education requirements and advise him on exploratory means to select a major. A student may not graduate from Mansfield State College without a major, except for the Bachelor of Arts: General Studies. Therefore, the undeclared student should have chosen a major by the end of two years or completion of sixty-four (64) hours.

General Education Requirements

The General Education requirements include two benchmark courses (which may be waived), a core of seven courses, and Model V.

Engl 090 and Math 090 are benchmark courses to assure a minimal starting level of skill in written communication and in computation. Credits for these two courses do not count toward the 128 required to graduate. The TSWE (a part of the Verbal SAT) is used to place students in English. Students who score less than forty (40) must take Engl 090; those who score forty to sixty waive Engl 090; and those who score over sixty waive both Engl 090 and Engl 112. The Department of Mathematics gives a placement test in math. Students who score less than twenty (20) must take Math 090; those students who score twenty or above waive Math 090. No one who fails the screening examination may take a mathematics course other than MA 090 until they have successfully completed MA 090. Students must take MA 090 if they do not attain the specified cut-off score on the screening examination. Should a student take a higher level math course and pass it prior to taking MA 090, MA 090 would still be required. MA 090 is not required of transfer students who enter M.S.C. with a degree that satisfies General Education nor of transfer students who enter with a math course which is accepted for transfer credit at the college. The MA 090 requirement applies to all other transfer students.

Students who have not taken either or both of the placement tests will do so during the first week of the semester.

The general education core consists of Engl 112 and 313, Speech 101, HPE 100, and three one credit physical education activity courses (three credit physical education courses do not meet the core requirement). Engl 313 must be passed with a grade of "C" or better. Engl 313 must be taken at Mansfield State College, therefore, no English composition course will be accepted in transfer for Engl 313. Transfer students who come having already taken a year of composition (I and II) will receive credit for Engl 112 (composition I) and for electives (composition II).

Group Requirements

The student should plan his academic work in such a way that he meets: (1) the so-called "core requirements" (as listed above), (2) any specific "group requirements" as required for his eventual major, and (3) any remaining General Education requirements in the "groups." The general pattern to be followed for General Education may be most easily summarized in the following way — the student elects four courses or twelve hours in each of three different groups and two courses in a fourth group. For courses available in General Education please see the General Education Group Choices (Model V) listed below.

Note: The practice of allowing eleven (11) credits, acquired

from three courses (4, 4, and 3 credits) to close Group III evolved over the years due to three (3) and four (4) credit courses in the sciences. Students who closed Group III in such a manner were not meeting the requirement: students were neither taking four (4) courses nor earning twelve (12) hours. Beginning with students entering in June, 1976, eleven (11) credits and three courses will no longer be allowed. Students should consult carefully with their advisor; contact the Office of Academic Affairs with any questions.

Before selecting courses in the "Groups" the student should carefully read the requirements or recommendations for his expected major and degree. It is often to the advantage of the student to complete all General Education requirements during the first two years; however, a student may carry uncompleted General Education requirements beyond the first two years. All General Education requirements must be met prior to graduation.

- A. A foreign student who comes to Mansfield State College from a country in which English is not the native language may waive the foreign language group (Group II) of Model V. No credit will be given, but the group is considered closed. The student must request application of this policy to him/herself within the first year of attendance and must supply documentation, if requested, of the dual language background.
- B. If a student selects Group II (Foreign Languages), the Department of Foreign Languages requires a minimum of two courses in the same language — i.e., 6 semester hours credit. At the least the 102 level course must be completed to close the requirement as a two course group. At the least the 202 level course must be completed to fulfill the requirement for a four course group. The group can also be closed as a four course group by completing 202 and one advanced course, or by completing two advanced courses. Notice that if one begins at the 201 level or above, the group can be closed with only two courses and yet considered as if it had been closed with four courses.
- C. If a student elects mathematics (Group IV), this Group will have been considered completed as a twelve (12) hour group by completion of any twelve credit hours listed below or by six credit hours of more advanced mathematics courses beginning with Math 112 or Math 113.
- D. Courses numbered 255, whatever the departmental prefix, are authorized to fulfill General Education requirements only with the approval of the Vice President for Academic Affairs. Information concerning which 255 courses have such approval for a given semester is available in the Office of Academic Affairs.

GENERAL EDUCATION GROUP CHOICES (Model V)

Group I — Humanities

Art — 101, 102, 201, 210, 229, 231, 241, 251, 271, 281, 295, 326, 345
English — 113, 200, 201, 202, 203, 210, 211, 215, 225, 226, 232, 240, 243, 246, 290, 291, 335
Music — 100, 111, 122, 123, 222, 223, 224
Philosophy — 201, 202, 220, 230, 240, 270, 275, 280
Speech/Theatre — 110, 200, 201, 202, 203, 204, 212, 305

Group II — Languages

French, German, Spanish — 101, 102, 201, 202 plus advanced courses by student petition

Group III — Sciences

Astronomy — 105, 106, 112
Biology — 101, 102, 210, 220, 240, 260
Chemistry — 101, 102, 103, 106, 111, 112
Geology — 101, 121, 122
Physics — 130, 151, 152, 165, 188, 211, 212

Group IV — Mathematics

Math — 101, 105, 107, 109, 111, 130, 140, 141, 160, 201, 202 plus advanced courses by student petition

Group V — Social Sciences

Anthropology — 101, 102
Economics — 101, 102, 204
Geography/Regional Planning — Geog 102, RGPL 102, 111, 222, 282
History — 101, 102, 104, 201, 202, 205, 210, 232, 250

Political Science — 101, 202, 210, 240
Psychology — 101, 220, 240, 250, 311
Sociology — 111, 121, 302, 305, 321, ED 100

Note: Courses listed as part of the student's major or professional sequence on the right-hand side of the Evaluation Record shall not count for General Education group closing even if such courses are otherwise acceptable for General Education.

INDEPENDENT STUDY

Independent Study is available in each curricular field. The appropriate curricular area prefix precedes the independent course number, 497, and the credit hours are from one to three. Independent study may be repeated for more than three (3) credits total, but one independent study project may be for no more than three (3) credits.

Independent study is an activity initiated by the student to increase his/her already advanced knowledge in a particular academic discipline. The subject is examined in an intensive manner with guidance by a faculty member who has special expertise in that subject.

To register for Independent Study a student prepares a "contract" (available with the Academic Deans' Office) which must be approved by the faculty director, chairperson, and dean. The contract sets forth a topical outline, reading list and/or other resources, papers or projects to be completed, and the basis for evaluating the student's work. A copy of the approved contract should be attached to the registration request, and a copy given to the student and faculty director.

VARIABLE CREDIT COURSES

In addition to Independent Study other courses on campus may be taken for a variety of credits. (Examples — some art courses, internships and preprofessional experience). Once the number of credits for such variable credit courses has been established through registration for the course with the Scheduling Office, the number of credits may not be changed.

INTERDISCIPLINARY STUDIES

Frequently studies involving more than one curricular area are offered. Such courses (ID) may be applied to General Education requirements, and with departmental approval may be applied to the major. Specific topics vary and will be announced each semester in the master schedule.

SPECIAL STUDY

A Special Study course is offered one time only by a curricular area for the purpose of (1) treating subjects of current, but not lasting interest, or (2) experimenting with an innovative pedagogical or curricular design. The appropriate curricular area prefix precedes the numbers 255 for freshman/sophomore level and 455 for junior/senior level. Such courses are listed in the master schedule each semester under the department offering the course.

DUAL MAJOR

A student may earn a dual major by fulfilling all requirements for each major within the requirements of the degree which will be awarded. Both majors will be listed on the student's permanent record.

Concerning General Education courses and a dual major — courses for the second major count toward General Education, if applicable. However, courses for the first major count only in the major.

Students should indicate one major as primary and one as secondary. If the student neglects to so specify, the second major to be adopted will be considered by the Records Office as secondary.

TIME SHORTENED DEGREE

The traditional undergraduate program is eight semesters. However, there are avenues available at the College that allow a student to earn a baccalaureate degree in less time. Included in these are carrying an above average course load, credit by examination, Advanced Placement, CLEP, and credit for military service.

SECOND BACCALAUREATE DEGREE

A student who possesses a baccalaureate degree may earn a second bachelor's degree upon completion of the following requirements: (1) a minimum of thirty-two (32) semester credit hours at

Mansfield State College beyond the first degree, (2) completion of all requirements for the major in which the second degree is to be earned, (3) the first degree will be considered to meet the College's general education requirements, except Engl 313, and (4) grade point average on all work attempted toward the second bachelor's degree of at least 2.00, and on all courses in the major of at least 2.00. (Internship, student teaching, and observation/participation credits are not counted in the required minimum of thirty-two credits.)

STUDENT ENRICHMENT SEMESTER

To expand the academic and life opportunities for its students and to increase their chances to participate in specialized programs and courses not available at Mansfield State College, the College will be a part of the Student Enrichment Semester (SES) program. Participating along with Mansfield in the program are Bloomsburg State College, Bucknell University, Lock Haven State College, Lycoming College, Susquehanna University, and Williamsport Area Community College.

As a sophomore, junior, or senior a student will be able to enroll for credit as a full-time student, normally for one term, at any cooperating institution. Each SES college will stipulate which of its courses and programs will be open to SES students. The Office of Academic Affairs at Mansfield in cooperation with the student's major department must approve the courses, programs, and credits prior to participating in SES.

A SES student will remain fully enrolled in his/her degree program at Mansfield and will simultaneously enroll on a full-time basis at the host institution according to its definition of full-time enrollment. The student will be subject to the rules and regulations of the host institution while there. It will extend all opportunities and benefits to a SES student that it provides for its own students, such as library, housing, meals, cultural activities, student organizations and activities, except where legal constraints provide otherwise. A SES student will not be eligible for financial aid from any host institution. Housing will be supplied by the host institution on a space-available basis.

SES students will pay tuition to Mansfield according to prevailing policies, including charges and deferred payment plans. Applicable non-tuition fees, such as room and board charges and student activities fees, will be paid to the host college. Information and application blanks will be available in the Office of Academic Affairs.

INTERNSHIP PROGRAM — PENNSYLVANIA STATE GOVERNMENT

Mansfield State College participates in the Life Experience Internship Program which is designed to provide the opportunity for college students to apprentice in government agencies and to combine "classroom theory with practical work experience."

Participants are placed in various state agencies for sixteen (16) weeks each semester and are paid (\$80.00 a week, 1975-76). Students remain registered at M.S.C., pay tuition, receive from 9-15 credits, and are supervised by a college faculty member. The program is available in the summer on a limited basis.

The possibilities of agencies is diverse; more information and application blanks may be obtained from the Assistant Vice President for Academic Affairs, Room 103, Alumni Hall.

INTERNSHIP PROGRAM — FEDERAL GOVERNMENT

During the summer Federal departments and agencies employ a limited number of students under the Federal Summer Intern Program. Selected students receive practical experience in some phase of Federal activity related to their individual career field. Most intern positions are in the Washington, D.C., metropolitan area, but some may be located in other major cities.

All interns must be United States citizens; they must have completed at least sixty (60) semester hours as of June; and they must be in the upper third of their class. Participants do not receive any academic credit but receive a weekly salary of approximately \$150.00 (Summer, 1976).

Mansfield State College receives information in early March on one or two positions for which the College may select applicants. The Office of Academic Affairs contacts the academic departments whose majors meet the specific job descriptions. However, interested students may also contact that office for information.

ACADEMIC INTEGRITY

STUDENTS

Faculty members are expected to take reasonable precautions to reduce to a minimum opportunities for dishonesty in academic work. Faculty should instruct the students as to the meaning of plagiarism so as to aid in solving the plagiarism problem. Where possible, the faculty member is expected to assess offenses of academic dishonesty in the interest of acceptable high standards. This is a matter primarily between the student and the instructor. Requests for special assistance may be made to the Office of Academic Affairs.

The *Password* contains the procedures to be followed to initiate disciplinary action in cases of academic dishonesty.

FACULTY

The faculty has the responsibility to apprise students of course evaluation criteria, to adhere to such stated criteria and procedures, and to determine grades in a fair and equitable manner.

The procedure set forth below is designed for use in those situations in which a student charges that a faculty member has discharged his/her professional duties in an improper, arbitrary, discriminatory or unjustified manner. Complaints which may be properly considered by means of these procedures include, but are not limited to, complaints about grades and complaints about changes in requirements for a course during the semester.

Complaints about grades may, among other things, be based upon racial, sexual or religious discrimination or other forms of favoritism; arbitrary, capricious or unreasonable methods of evaluation; lack of precautions taken by the instructor against cheating or plagiarism; or unfair penalties for legally recognized absences from class or examination.

Procedure

- A. The student should first present the complaint, orally and informally, directly to the faculty member involved.
- B. If no agreement is reached at step A the student may prepare a written complaint which contains supporting evidence and indicates the desired resolution. This written complaint must be submitted to the departmental chairperson and the faculty member within twenty regular semester class days of the date on which the student became aware, or should have become aware, of the occurrence leading to the complaint. The faculty member, the student and the chairperson shall meet together to discuss the complaint. The chairperson may conduct whatever informal investigation seems necessary and should attempt to achieve a negotiated settlement.
If the complaint is directed against the departmental chairperson, the written complaint must be submitted to the school dean who shall select a senior member of the department to fill the chairperson's role in this procedure.
- C. If the student is still unsatisfied he/she may have a hearing before a committee especially formed for that purpose. The request for such a hearing must be presented to the school dean within five regular semester class days of the meeting required in step B. This request must be accompanied by a copy of the written complaint, which may be redrafted before it is submitted.
- D. The committee to hear the complaint shall be composed of three faculty members, two students and the school dean who shall be a non-voting member and shall serve as chairperson. The chairperson shall be responsible for scheduling and conducting committee meetings and for insuring that the procedures described herein are carried out.

The three faculty members of the committee shall be chosen by the dean from a list of those recommended by the departmental

chairperson. The two student members shall be selected by the Executive Committee of the Student Government Association and the Dean of Students.

The Committee shall adopt its own rules of procedure, consistent with these guidelines.

- E. The student and the faculty member shall each appear before the committee at the same time. Each may be accompanied by a member of the College community to act as an advocate.
- F. The student and the faculty member may each present to the committee such witnesses as they feel are desirable.
- G. The committee may conduct an investigation and collect evidence. The student and the faculty member must be given this evidence and each afforded an opportunity to rebut it.
- H. The faculty member shall make all pertinent materials and grading records available to the committee. The committee may, at its discretion, make available to the student those records, or portions thereof, which it judges to be relevant in light of the student's allegations.
- I. The committee shall consider the evidence and make a recommendation to the faculty member as to how the complaint shall be settled. The faculty member should be guided by, but is not bound by, this recommendation.
- J. If either party is still dissatisfied he/she may appeal to the Vice President for Academic Affairs.
- K. The Vice President shall hear the evidence by each side and may collect further evidence as desirable. Both sides must be given access to such evidence and given the opportunity to rebut it.
- L. The Vice President shall take whatever action he/she feels necessary to restore equity in the situation, with the provision that a course grade may not be altered to A, B, C, or D nor may a grade of F be altered to P without the consent of the faculty member who assigned the grade. Any grade may be altered to W and any passing grade may be altered to P without such consent.

TRANSCRIPTS

Official transcripts of credits earned on this campus are prepared by the Registrar's Office and issued according to the following policies.

1. Student records are confidential records; transcripts, therefore, are issued only at the written request of the student. Requests by telephone are not acceptable.
2. A student may be issued one free unofficial transcript each semester while in attendance at Mansfield State College. After the first transcript has been issued, a charge of \$1.00 is made for each additional transcript.
When not enrolled one free transcript will be provided with the same charge of \$1.00 for each additional transcript.
3. No transcript is issued to or for a student who is indebted to the College until such indebtedness has been paid in full.
4. Official transcripts of credit earned at other institutions which have been presented for admission or evaluation become a part of the student's permanent record in the Registrar's Office and are not reissued or copied for distribution. Transcripts from other institutions, if needed, must be obtained directly from the institution in question.
5. No official transcript will be issued directly to the student. A student may have a transcript of his/her academic record for their own file, but it will not be signed or bear the seal of the College. A student may be issued one free unofficial transcript each semester while in attendance at M.S.C.

PROGRAMS OF STUDY

ALLIED HEALTH STUDIES

Associate in Science (A.S.) degrees are offered in Respiratory Therapy and X-Ray Technology through a joint program with the Robert Packer Hospital in Sayre, Pennsylvania. Students in these two-year programs must also complete the appropriate practicum during the intervening summer session. All course and laboratory work is performed at the Hospital; instruction is by both the College and the Hospital faculty and staff.

Students in the Associate degree programs will be required to achieve a 2.0 grade point average in order to graduate, and will be subject to the academic rules and regulations applying at both the College and the Hospital.

The Robert Packer Hospital programs in Respiratory Therapy and X-Ray Technology have been certified by the Council on Medical Education of the American Medical Association. Completion of the A.S. degree programs will prepare students for the appropriate Board examination for certification.

Admission to the program is granted jointly by the College and the Hospital. Application may be made to either institution, as may inquiries seeking further information.

The College also offers the Bachelor of Science degree in Medical Technology; description of this program will be found under Biology.

Students in both programs must complete the following College courses: Eng 112; Spc 101; Psy 100; an appropriate Math course; an appropriate course in Chemistry or Physics; an appropriate course in the area of social problems; and an appropriate course in the principles of management. Further, the following courses offered by the Hospital faculty must be completed: Biology of Human Systems I and II, and Pathology.

Respiratory Therapy Program. The following courses complete the program in Respiratory Therapy: RT I-IV; Physiology of Respiration; Chemistry of Gases and Solutions; Microbiology; Pharmacology; and Clinical Practicum, offered during the summer session. Extensive application of procedures will be developed during the two-year program.

X-Ray Technology Program. The following courses complete the program in X-Ray Technology: XRT I-IV; X-Ray Physics; Clinical Practicum, offered during the summer session; and Clinical Practice and Evaluation. Extensive application of procedures will be developed during the two-year program.

ART

The Department of Art in the School of Fine and Applied Arts, offers three degree programs for the student's specialized training in Art. The B.A. in Art History, the B.A. in Studio Art and the B.S. in Art Education are offered as four-year degree programs designed for the student's individual needs and interests. The Art Department offers varied experiences for the non-art major to explore and investigate visual imagery and communication and to develop skills in all studio courses on an individual basis. The Art History courses provide cultural and historical relevance for all college and special students.

The Bachelor of Arts degree in Art History offers students interested in the historical and cultural origins of the visual arts the opportunity of individually selecting 21 semester hours (S.H.) of electives in art history courses as well as gaining a solid foundation in studio art. A student selecting the Bachelor of Arts program in Art History will be prepared for graduate school and for jobs related to the program of study.

All students must complete the core and group requirements of 56 S.H. for the General Education program. For the Art History student the major core requirement of ArtH 102 should be taken the first semester, while Art 300 and Art 404 may be taken during the junior or senior year. The twenty-one S.H. of electives in art history should be selected according to interest and spaced over the freshman, sophomore, junior and senior years. Nine S.H. of elective studio courses are to be selected to help the student experience the creative aspect of art.

The Art History major has 31 S.H. of free electives which may be selected from any undergraduate course. Suggested areas related to Art History would include: Philosophy, Literature, Music, Theatre and History. Six S.H. of a language is required at the intermediate level for the Art History major to qualify for graduate programs, as most graduate schools offering a Master's Degree in Art History have a language requirement for admission to their programs of study.

The Bachelor of Arts degree in Studio Art provides interested students the opportunity to develop their studio skills to an advanced level of proficiency. The competencies and experiences, developed through training as a Studio Art major, will prepare the student as a professional artist and for graduate study. The Studio Art program offers the selection of two areas of concentration of 18 semester credit hours each. Students will major in one of the following concentrations: I.) Drawing, Painting and Printmaking or, II.) Ceramics, Jewelry, Sculpture, Fibers and Crafts.

All students, including Studio Art majors, must complete the core and group requirements of 56 S.H. in the General Education program. The Studio Art major will complete the required major core of ArtH 201, 210, and 241 the first semester; Art 295 the second semester; and Art 300 will be taken during the junior or senior year.

Each student will choose an area of concentration in which s/he wishes to specialize and should take 18 semester hours in either: Concentration I: Advanced Drawing 3-6 S.H., Painting and Advanced Painting 3-9 S.H., Graphics and Advanced Graphics 3-9 S.H., and Waterbase Media and Advanced Waterbase Media 3-9 S.H.; or, Concentration II: Ceramics and Advanced Ceramics 3-9 S.H., Advanced Crafts 3-6 S.H., Jewelry and Advanced Jewelry 3-9 S.H., Sculpture and Advanced Sculpture 3-9 S.H., Fibers and Advanced Fibers 3-9 S.H. These courses will be taken during the last seven semesters with the advisor's approval.

Each Studio Art major will select 9 S.H. of studio course work which is not in his/her concentration area to help develop insights and skills in complementary areas of study. These may be taken any semester. The Studio Art major is required to elect 9 S.H. of art history courses of his/her choice during any semester to complete the program of study in the major of 51 S.H.

To complete the 128 S.H. for graduation the student has a choice of 21 S.H. of free electives to be selected from any undergraduate course.

The Art Education Curriculum offers teaching certification through the School of Education. Upon satisfactory completion, the degree of Bachelor of Science in Art Education is awarded, qualifying the graduate to teach art in the elementary and secondary schools. The curriculum in Art Education is structured to guide prospective teachers in meeting the challenge of accomplishment in general

education, to develop their abilities by providing studio experiences in the areas of drawing, painting, sculpture, graphic arts, ceramics and applied design, and to provide a rich background in aesthetics, theory and criticism, as well as courses in psychology and the philosophy of art education. Observation, participation and student teaching are the culminating experiences of the total Art Education Program.

The program contains the elements of a firm basis for the professional artist and, with additional training and experience, Art Education students may enter careers such as: Art Therapy, art for the mentally and physically handicapped, museum employment (curator or docent) and various commercial art opportunities.

All students must complete the core and group requirements of the General Education Program. All General Education requirements of 56 S.H. must be completed before graduation.

Of the fifty-six hours required in General Education, the following courses should be taken in the freshman year: ArtH 102 and Psy 101. In the sophomore year, six credits each will be taken in the sciences, social sciences, and humanities or languages.

In the areas of specialization of the thirty-three required credits, the following three-credit courses will be taken during the first three years: Art 201, 210, 231, 241, 251, 261, 271, 281, and 295.

A minimum of 6 semester hours will be elected from the following courses in the sophomore, junior and senior years: Art 298, 302, 211, 332, 342, 343, 352, 362, 372, 382, 395, 398, Ed 420, Art 345, 346, 396, 404, 445, and 497.

ArtH 225 will be required in the junior year, and 3 additional hours of art history electives will be taken from the following: ArtH 220, 221, 222, 326, 227, 228, 229, or 230.

In the Professional Education area, ArtE 288 will be required in the freshman year. ArtE 290 will be taken in the sophomore year.

During the junior year ArtE 292 will be taken, as well as Psy 230. These classes are the prerequisites for ArtE 294, which should be taken either during the junior or senior year. Ed 302 and 400 complete the Professional Education Requirements.

The transfer student is expected to meet the specialized needs of the department. If the student's art experience is limited, the transfer student is expected to make up any required work. Such matters would be up to the judgment of the Chairman of the Art Department.

Candidates for admission to any one of the Art programs must meet the general requirements set by the Office of Admissions as well as meeting with the art department staff for a personal interview. For Art Education and Studio Art candidates, a portfolio best representing the student's proficiency in art must be presented at the personal interview. Contents will be evaluated and discussed at that time.

It is suggested the portfolio contain at least ten pieces and have the following:

1. Examples of two dimensional art such as drawing, painting, printmaking, collage, etc.
2. Examples of three dimensional art such as sculpture, jewelry, textiles, ceramics, crafts, etc. Slides or photos of the work may be sent.
3. Examples in the field of design which will employ knowledge of design relationships, color and lettering.
4. Other examples of creative endeavor in the visual arts.

Two dimensional art should be presented in an attractive manner using clean-cut mats and proper backing support. Art that is copied from magazines and book reproductions of other artists will not be acceptable.

BIOLOGY

The biology department offers non-major students an opportunity to pursue studies which will expand and broaden their knowledge and understanding of the biological sciences. Courses of study include Bio 101, 102, 210, 220, 260, and 240.

Three undergraduate baccalaureate degree programs are offered to the biology major: Bachelor of Arts (B.A.), Bachelor of Science in Education (B.S.E.) and Bachelor of Science — Medical Technology (B.S.M.T.). Common to all three programs is a core of required biology courses which are: Bio 111, 210, 220, plus 2 of 3 options selected from the following: Option A — Bio 330 or 332, Option B — Bio 340, Option C — Bio 355. Medical Technology students take courses from all three options. Courses in chemistry, mathematics and physics are also required.

The Bachelor of Arts (B.A.) program prepares the student for graduate school in biological areas including optometry, dentistry, veterinary science and medicine as well as biological positions with business, industry and government agencies. In addition to the core requirements plus Bio 404, and 310, the student completes Chem 111, 112, 211, 212, Math 140, 141 with an option to substitute Math 105 and 107 for Math 141; Phys 191, 192 and biology electives.

The Secondary Education (B.S.E.) program prepares the student to enter the teaching profession with certification in both biology and general science and also to pursue study at the graduate level. The B.S.E. major takes the same basic courses in biology, chemistry, mathematics and physics as those required for the B.A. program. Additional biology electives, courses in professional education and student teaching are necessary for completion of the B.S.E. program.

The Medical Technology (B.S.) program provides the student with an opportunity to prepare for a career in Medical Technology. Under this program the student completes three years of pre-professional study at Mansfield State College and one year of clinical study at an approved hospital School of Medical Technology. With some modifications basic requirements are the same as those for the B.A. and Secondary Education programs. Ecology and Biology Seminars are not required. However, Physiology, Genetics and Microbiology are required. Under advisement, the student earns a minimum of 96 credits during the three years at the college. When the student has successfully met all General Education and pre-professional requirements at the College, he/she is eligible to apply as a candidate for admission to the professional or clinical year of study (50 weeks) at an approved hospital School of Medical Technology. Upon acceptance by the hospital, the student then completes the fourth year of training which includes studies in Microbiology, Chemistry, Clinical Microscopy, Hematology, Serology, Blood Bank, and Histologic Technique for a total of 32 semester hours. When all phases of the program are completed (3 years of pre-professional and 1 year of clinical) the student is awarded the degree Bachelor of Science — Medical Technology by Mansfield State College. Furthermore, the student is now eligible and is expected to take the examination for registration given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

Students who have taken Bio 101 and subsequently choose biology as a major must complete the core of required courses to the satisfaction of the biology department. To avoid loss of time, a student wishing to transfer to Mansfield from other colleges and universities should have completed during the freshman and sophomore year the equivalent of the required courses previously listed for the biology major.

A two year program leading to the Associate of Science in Fish Culture is also housed in the biology department. The program is designed to give the student the generalized and specialized knowledge necessary to pursue a career in the field of fish culture. His role in that field is a technical one and consists of such activities as preparing diets for hatchery fish, monitoring water quality in hatcheries and potential stocking sites, diagnosing and treating the common ailments of hatchery fish, and collecting and analyzing routine experimental results under the supervision of an ichthyologist or hatchery manager. Fish Culture technicians normally find employment with governmental agencies concerned with sport fishing and increasingly with private corporations raising fish commercially. With the future world supply of food and particularly protein

in question, the field of fish culture promises to become increasingly important as a supplier of foodstuffs. The program includes a placement service to aid graduates in finding the most favorable employment.

The elements of the program include basic skills in writing and mathematics, basic biology and chemistry, specialized courses in biology and fish culture and practical field experience gained through the Practicum in Fish Culture. Because the degree requires intensive training in specific fields and because of the cumulative development of competencies, students are neither allowed to substitute courses nor to take them out of sequence. Required courses include the following: Eng 112; Speech 101; Math 105 and Math elective; Chem 101, 102; Bio 210, 220, 340, 355, 362, 404, 450 and 497. Courses unique to the program and not open to students from other programs include BFC 213-218. In addition, students are required to participate in seminars in fish culture.

BUSINESS ADMINISTRATION

The real world of business, industry, and government requires an understanding of complex relationships as well as certain concepts, skills, and techniques. The Bachelor of Science degree program in Business Administration is intended to provide a broad general education in business and management, emphasizing common underlying concepts, and without undue specialization in any one field. In addition, the program prepares students who are so inclined for graduate study in business, quantitative methods, and law.

All majors must satisfactorily complete a core of fourteen (14) courses totaling forty-two (42) semester hours, and four (4) additional courses totaling twelve (12) semester hours elected from cognate areas. Those core courses required of all majors are BUS 120, 330, 340, 350, 410, 490, CIS 100, 105, 110, 215, 480, ECON 101, 102, SOC 203. The opportunity exists for qualified students to spend a semester as an intern working in a business or industry, thus acquiring practical knowledge and experience.

Beyond these requirements there is sufficient flexibility in the program to allow those students who so desire to tailor, by judicious selection of electives in this and other departments, a concentration in an area of their choice. Examples of such areas are accounting, advertising, economics, information systems management, marketing, and quantitative methods. Additional courses are planned which are expected to make other concentrations available.

By election of appropriate accounting courses, successful students will be qualified to sit in their senior year for the examination for the Certificate in Management Accounting, administered by the Institute of Management Accounting; and/or for the examination for Certified Public Accounting, administered by the Pennsylvania State Board of Examiners. Interested students should consult with the Department Chairperson for further information.

The Bachelor of Science program in Business Administration is housed in the Department of Business, Economics, and Computer Science. Additional departmental offerings will be found on page 26 (Computer and Information Sciences) and page 28 (Economics); and a student advisement manual is available. The Department also offers the Bachelor of Science degree in Information Processing (for which see Computer and Information Sciences), and it is possible for the superior student to achieve a double major in four years.

CHEMISTRY

The Chemistry Department offers both the B.S.E. degree for teacher certification and the B.S. degree for the professional chemist.

The B.S. program provides the necessary qualifications for a professional chemist and/or further graduate programs leading to the M.S. and Ph.D. degrees. The B.S. program also provides sound and adequate preparation for areas such as medicine, dentistry, optometry, patent law and other professions. The program is structured to meet the minimum standards as outlined by The American Chemical Society.

The B.S.E. program is designed for those students planning to become teachers at the secondary education level. The teacher training portion of the B.S.E. program is supervised by the Department of Secondary Education.

All prospective chemistry majors should have, or obtain the first semester, the equivalent of high school algebra and trigonometry.

Both degree programs include the following courses: Chem. 111, 112; Chem. 211, 212; Chem. 311; Chem 321, 322; Chem. 332 and Chem. 410 (two semesters); Math. 140, 141, 240 plus Math. 130 or a mathematics elective; Physics 188 and 211.

Additional courses in the upper divisional level required for the B.S. degree are: Chem. 420 and Chem. 431 plus two electives in Chemistry exclusive of Chem. 490 plus Chem. 497 plus electives in related fields.

One upper level elective is required in the B.S.E. program.

COMPUTER AND INFORMATION SCIENCES

Emergence of computers as major devices in the handling of great amounts of information is a very recent development. The course offerings described below are designed to teach recognition of and procedures for meeting the information systems for managerial needs in business organizations, but those of governmental agencies, health services, social welfare organizations and others are treated. Further, the courses provide for mastering computer technology, application, and theory well beyond computer programming level.

The Bachelor of Science degree with a major in Information Processing requires satisfactory completion of eleven (11) Computer and Information Sciences courses totaling thirty-three (33) semester hours; and eight (8) particular courses in other areas. Those courses required of all majors are CIS 100, 101, 105, 110, 230, MA 105, 107, 109, 111, ECON 101, 102, SOC 111, 203. The opportunity exists for qualified students to spend a semester as an intern working in an industrial or governmental office, thus acquiring practical knowledge and experience.

The program is flexible allowing students to place their emphases either on Computer Science aspects, on computer applications, or on organizational systems. Successful students will, in their senior year, be qualified to sit for the Certificate in Data Processing (CDP) examination administered by the Institute for Certification of Computer Professionals. By election of appropriate accounting courses successful students will also be qualified to sit for the examination for Certified Public Accountant, administered by the Pennsylvania State Board of Examiners. Interested students should consult with the Department Chairperson for further information.

The Bachelor of Science program in Information Processing is housed in the Department of Business, Economics, and Computer Science. Additional departmental offerings will be found on page 25 (Business Administration) and page 28 (Economics); and a student advisement manual is available.

The Department also offers the Bachelor of Science degree in Business Administration (for which see Business Administration), and it is possible for the superior student to achieve a double major in four years.

Students interested in gaining a general appreciation of the significance and potential consequences of the use of computers in modern society are encouraged to elect the Computers in Society course. Several courses when combined will provide non-majors with a foundation in modern accounting practice.

CRIMINAL JUSTICE ADMINISTRATION

The Department of Criminal Justice Administration offers a general background in Law Enforcement, Corrections, and Judicial Administration leading to a Bachelor of Arts degree. The majority of the students in Criminal Justice Administration are prepared for first-level entry in law enforcement agencies, institutional or community-based corrections, or other positions in Criminal Justice Administration. (Those entering municipal and State Police Departments are, in addition, required by statute to undertake training at Police Academies.) In combination with other fields of study the program in Criminal Justice Administration assists in the preparation of students who are interested in careers in law, public administration, planning, court services, juvenile delinquency control, crime prevention, and urban problems. The department also prepares students who wish to pursue graduate study in specialized areas of Criminal Justice Administration.

A prudent selection of courses is most desirable in preparing for immediate employment or post-graduate education. Therefore, great emphasis is placed on student-advisor relationships. Opportunity is provided for field experience in a public Criminal Justice agency through directed internships.

All students must fulfill the General Education requirements of the College.

EARTH — SPACE SCIENCE

The requirements for the Bachelor of Science in Secondary Education degree in this field are straightforward. The Group III, Science, area of general education will be a four course group. Included here will be one Geology and one Astronomy course. In addition, 9 courses in the sciences will be taken under rigorous advising by the Earth-Space science faculty within the Department of Physics. Fulfilling these two requirements will yield a minimum of 39 semester hours in the field.

The purpose of these broad requirements is to enable students choosing this major to uniquely bias their own training into such areas in Astronomy, Geology, Geophysics, Geochemistry, and related engineering fields. Under proper course selection this program can lead to dual certification in a number of content areas.

ECONOMICS

Providing knowledge of the ways money, men and products are interrelated, especially in American society, is the principal emphasis of the offerings of economics. Students interested in careers in business, governmental service or law should consider taking work in this area. A sound foundation in economics is desirable for most graduate programs in business administration or public administration.

Although a formal major in economics is not offered at the present time, students majoring in Business Administration may achieve an emphasis in economics by tailoring their electives to include additional economics courses. Those students desiring to do graduate study in economics should consult with the faculty.

The Economics faculty is part of the Department of Business, Economics, and Computer Science. Additional departmental offerings will be found on page 25 (Business Administration), and page 26 (Computer and Information Sciences). The Department offers the Bachelor of Science degree in Business Administration and in Information Processing; and it is possible for the superior student to achieve a double major in four years.

ELEMENTARY EDUCATION

Elementary Education at Mansfield State College has as its purpose the preparation of men and women for teaching in the elementary school. It is a four-year program leading to the degree of Bachelor of Science in Education. Included is a sequence of field experiences at the sophomore, junior and senior years. Offerings in the Department of Elementary Education and in related professional education departments should be scheduled during the junior and senior years.

The Department of Elementary Education recommends that students planning to major in Elementary Education make a strong effort to build a background of experience with young children. A student may choose to work in summer camps or playgrounds, in summer school programs as teacher aides or in similar activities. In some cases students find it advantageous to serve in a para-professional role with children prior to initiating formal academic work.

Students tentatively in the field of elementary education should include Psy 101 and 230 in their first two years of General Education. Students are expected to complete both courses prior to enrolling in elementary education courses at the junior level.

The two semester course, EdEl 201-202, is to be scheduled during the sophomore year, and is required for acceptance as an upper division student with a major in elementary education. Students planning to transfer to Mansfield State College at the junior year should contact the department chairman regarding the EdEl 201-202 requirements.

During the last semester as a sophomore, a student will apply to the Department of Elementary Education for acceptance as an upper division student with a major in Elementary Education. Requirements for upper division acceptance include: near completion of the General Education requirements, an overall 2.0 quality point average, grades of C or better in freshman English, and recommendation by the student's advisor.

During the junior year a student will be scheduled for a Professional Semester. The Professional Semester includes six courses in the major area of specialization, and an observation/participation experience in the local elementary school. This integrated experience serves as an opportunity for students to work with boys and girls in a classroom setting and to participate in a variety of experiences related to the methods courses offered by the department. The following courses are included in the Professional Semester: EdEl 301, 360, 383, 384, 386, and 387.

In the major area of specialization, the following courses are also required: EdEl 350, 380, 392, 430, and HPE 350. Total 31 credit hours.

As part of the major area of specialization, students must complete at least 15 semester hours in one of the following areas: Art, Early Childhood Education, English, Foreign Languages, Mathematics, Music, Sciences, Social Sciences, Speech and Theatre, Communication Skills, Environmental Education, and Education of Exceptional Children.

In order to meet minimum requirements for student teaching, students must maintain at least an overall 2.0 quality point average and a 2.0 average for the 46 hours in their area of specialization as indicated above.

Students who major in Elementary Education are required to complete an additional 21 semester hours in professional education, including Ed 301, 302, 401, EdEl 401, and 400.

ENGLISH

The Department of English teaches students to communicate feelings and ideas in an organized manner through the exact use of language; it enables them to read imaginative and intellectual texts with mature understanding and sensitivity. It familiarizes them with modern and traditional grammar, the history of the language, and the scope and continuity of English and American literature. It offers special series of courses in journalism and creative writing. The fact that the Department publishes a national literary magazine, THE FALCON, creates a favorable climate for the teaching of writing.

Programs in English are of two kinds: (a) a program leading to the Bachelor of Science in Education degree and to certification for teaching in the public schools and (b) a program leading to the Bachelor of Arts degree. The latter, "Bachelor-of-Arts" major offers a suitable preprofessional training for careers in law, medicine, and business. It is specific preparation, further, for careers in editing, technical writing, advertising, and other forms of communication employed in commerce and the mass media.

Major: thirty-six hours beyond Eng. 112 are required of all English majors. The following courses must be included in the program of a student preparing to teach in the secondary schools: Eng 200, 201, 202, 203, 225, 226, 235, and either 358 or 359. Except for Eng 225 and 226, the same courses must be included in the program of a student working toward the Bachelor of Arts degree. Literature courses at the 200 level (and Eng. 290, 291 and Eng. 230 Practical Writing) may not be counted as English electives for a major or minor.

All English majors must achieve second-year proficiency in a foreign language. Speech 200 and 400 are required of students preparing to teach in the secondary schools.

By the end of the sophomore year an English major should have completed Eng 200, 201, 225 and one English elective. Transfer students must satisfy all Departmental requirements.

Eighteen hours beyond Eng 112 are required of students completing a minor emphasis in English. The following should be included: Eng 200, 201, and either 202 or 203.

FOREIGN LANGUAGES

Educational objectives of the Department of Foreign Languages are so structured as to meet the needs of students going into either teacher education or liberal arts.

Briefly, the Department of Foreign Languages provides instruction to meet the needs of students who wish to build a liberal education around the study of a foreign language and its culture; develop language competence for comprehension, speaking, reading and writing; teach in public or private schools; prepare for graduate study; enter the federal government services, private business, non-governmental organizations, and other areas requiring knowledge of a foreign language.

Requirements for the language major are: Intermediate (French, German, Spanish) 201, 202 (qualified students may substitute more advanced courses for language 201, 202); French 205, German 205, Spanish 205 Phonetics and Pronunciation; Conversation and Civilization 300 (Spanish majors are required to elect 210 or 305 and 306 or 307); Advanced Structure 320; Survey of Literature 330, 331. Remaining courses to be taken in electives of the same language to bring the total accumulation to the minimum requirement of 30 credit hours in the chosen language field.

Additionally, or in lieu of a portion of the major program, foreign study can be arranged. Foreign study is open to students who wish to continue the study of the language abroad. Plans for study should be presented at least two semesters prior to departure and should be approved by the department chairman. Number of credits granted will be based upon validated credentials presented to the department and students should register for Fr., Ger., Span. 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad.

BACHELOR OF ARTS: GENERAL STUDIES (Self-designed major)

The Bachelor of Arts: General Studies program allows selected students to design their own major program in close conjunction with a faculty advisor. The degree is offered by Mansfield State College in recognition of the fact that some students enter college with specific academic or career goals that might not be met in one of the existing programs in the College. Additionally, the College recognizes that certain students have attained a level of intellectual maturity that allows them to explore broader areas and prepare such a specialized program.

Students in the program must meet the College's requirements in General Education, as well as all other academic requirements. No major concentration is required, but no student shall take more than 21 credits in any single field of study (e.g. Chemistry). Credits beyond 21 shall require that the student declare a major in that Department, unless there are special circumstances. All academic rules and regulations of the College shall apply to students in the General Studies program except those pertaining to a major.

With the faculty advisor, the student should prepare a meaningful program. Students should take note that this degree program in General Studies does not necessarily prepare them for a specific career, although a well-designed sequence of courses can lead to such general fields as environmental concerns, area studies, and minority studies.

GEOGRAPHY AND REGIONAL PLANNING

Students in the Department of Geography and Regional Planning may elect either the Bachelor of Arts degree program with its several options, or the social studies comprehensive-geography emphasis, B.S.E. degree program. The options available to students in the liberal arts program are (1) a major in geography, (2) a major in geography with an emphasis in regional planning, and (3) a major in any liberal arts field with the regional planning emphasis.

THE B.A. DEGREE PROGRAM IN GEOGRAPHY is intended to prepare qualified and able geography majors for graduate study or entrance into the many and varied fields of employment in government and business open to geographers. A judicious selection of courses is most important in preparing for future employment. Thus, the Department places strong emphasis on the student-advisor relationship. An individual tailored program permits sufficient flexibility for the student who knows his area of specialized interest, while at the same time a generally broad geographic perspective assures that the objectives of the Department are met. You are strongly advised to seek out your assigned or selected advisor early in your college program.

All Mansfield students must satisfy the General Education requirements of the College before being admitted to upper-divisional study in their major field. In fulfilling these General Education requirements, geography majors should give their most serious consideration to improving or obtaining those basic skills which will enhance their degree. These skills include clear writing, effective speaking, a foreign language, and the use of statistics and the computer.

Geog. 102 and 111 are required courses in the General Education program for geography majors, although both courses may be waived by examination given with the approval of your advisor. The examination will only be allowed, however, where there is sufficient evidence that the student already has an adequate background in geography.

Beyond this General Education requirement, geography majors must complete thirty-six hours of geography or approved cognate courses. Of the thirty-six hours, 13 hours must include Geog. 230, 360, 380, and 498. The remaining 23 hours will be arranged with the student's advisor to meet the individual's special interest. When deemed appropriate by the advisor, six hours of the major requirement can be met by courses in those fields which complement and supplement the special field of interest.

THE B.A. DEGREE PROGRAM IN GEOGRAPHY WITH A REGIONAL PLANNING EMPHASIS is intended to prepare qualified and able students for a career in planning. This program differs from the straight geography major, B.A. program, in the following ways: (1) a reduction in the number of hours required for the major — from 36 to 31 semester hours — although the required courses for the major remain the same, and by (2) a "Professional Sequence" of 36 semester hours.

The general education requirements remain basically the same, although some courses in Language and Mathematics tools are strongly recommended which can be satisfied within the general education program.

THE B.A. DEGREE PROGRAM IN LIBERAL ARTS WITH A REGIONAL PLANNING EMPHASIS takes into account the multi-disciplinary nature of the planning profession. Thus, any student in liberal arts and sciences, regardless of major, can enroll, if he or she wishes, in this program. However, in addition to the professional sequence of 36 required hours, the student should be prepared to obtain a required core program of three geography courses. Two of these courses (Geog. 102 and 111) may be taken as part of the student's general education program. The third required course is Geog. 230.

THE B.S.E. SOCIAL STUDIES COMPREHENSIVE-GEOGRAPHY EMPHASIS program is designed to meet the general standards pertaining to college programs for the preparation of social studies teachers. The Department stresses the interdisciplinary approach to solving social-environmental problems and the cultural historical approach to area (i.e., world cultures) studies. In combination with other programs, the Department also contributes to the preparation of teachers for earth-general science.

General Education requirements are similar to those noted in

the B.A. program. Exceptions are the six hours required in the Mathematics group and the twenty-two hours required in the Social Sciences distributed as follows: Psy. 101, Geog. 102, six hours in U.S. History, and ten hours of electives from among three of the following four areas — anthropology, economics, sociology, political science.

Thirty-three hours beyond Geog. 102 are required. These hours will include Geog. 111, 231, 360, and 380. Additional requirements for the program: any one regional course, any one systematic course, three free electives in geography, and one free elective in the social studies.

HISTORY

The Bachelor of Arts program in History is designed for individuals who might wish to seek employment in Federal and State governmental agencies, social and private agencies, museums, archives, the Federal Bureau of Investigation, or for a career in teaching on the college or university level. In the latter case advanced professional study leading to the M.A. and Ph.D. is required. The B.A. in history will enable the qualified student to enter graduate school, in pursuance of these advanced degrees or to prepare for admission to law school, medical school or the ministry. This program will provide the undergraduate with a full understanding of the methods and concepts of historical investigation, an acquaintance with the various schools of historical interpretation, and the necessary preparation for a career as a professional historian.

Requirements for the B.A. degree in history: A total of 33-36 semester hours in history is required for a history major. During the first four semesters the potential history major is advised to include Hist. 101 and/or Hist. 102 and Hist. 201 and/or Hist. 202, in his schedule since at least one course from each group will be required to fulfill the major. The history major must also take History 300, Historiography in his junior year. The History major requires a minimum of 18 semester hours of upper-division history courses but no more than 12 semester hours should be in any one of the following areas: American, European, or Latin American. In addition, 3 semester hours are required in Third World History and 3 additional semester hours in Third World History or Third World Social Science courses (anthropology, geography, or political science). Also required are 12 semester hours selected from course offerings in the social sciences (anthropology, economics, geography, political science, psychology or sociology).

For the B.S.E. social studies comprehensive-history emphasis, the following departmentally required courses in General Education must be completed: Hist. 101, 102, 201 and 202.

Upper-division courses required for the B.S.E. include: Hist. 300, taken in the junior year, Hist. 307, 365, 310 and one upper-division course in United States History, one in Third World (the emerging nations or Asia, Africa, the Middle and Near East or Latin America), and one in Third World History or Third World Anthropology, geography, or political science and one free history elective. A total of 33-36 semester hours of history is required to fulfill the B.S.E. social studies-history emphasis. In addition, the student must take 21 semester hours in the social sciences; 12 semester hours are required such as anthropology or sociology, human geography; 9 semester hours are free electives with no more than 6 in any one discipline.

HOME ECONOMICS

The Home Economics curriculum emphasizes both the theoretical and practical bases which contribute to preparing home economists who will work professionally or as volunteers to improve the quality of life for individuals and families. Four major home economics programs are offered and from these the student may choose one of five options: Home Economics Education, Food Service, Consumer Service with options in Food and Equipment and in Clothing and Textiles, and Child and Family Services. Common to all four of the home economics programs is a core of introductory home economics courses which provides the opportunities to survey the many and varied professional opportunities in home economics. They are HEC. 100, 101, 111, 121, 131, 321 and 323.

Each of the four home economics programs consists of three parts. Studies in general education help the student to broaden his/her academic background and to provide some depth study in the root disciplines upon which home economics is based, including humanities, natural sciences, social sciences, mathematics, and languages. Courses in the professional area provide the practical and theoretical background which help one to achieve competencies necessary for becoming a professional home economist. Courses in home economics, the area of specialization, provide some expertise in at least one of the five areas of home economics and an acquaintance with the other areas of home economics.

Completion of the Home Economics Education Program satisfies the requirements for certification to teach home economics from nursery school through grade twelve in Pennsylvania schools. Home Economics Education graduates are qualified to teach in both consumer-homemaking programs and in home economics related occupational programs in middle, junior, and senior high school and in vocational-technical schools. For the home economics teacher, breadth and some depth study in the five areas of home economics includes child development and family relations, clothing and textiles, consumer education and management, food and nutrition, and housing. Beginning in the sophomore year students majoring in Home Economics Education have professional experience in schools culminating in a semester during the senior year of student teaching.

Required courses recommended for the first four semesters in Home Economics Education are: Psy. 101, Bio. 101, Chem. 101 and 102, HEC. 100, 101, 111, 121, 131, 201, 215, 216, 232, 321, and 391.

Other courses in the Home Economics Education curriculum are: Psy. 230, Ed. 302, Ed. 401; HEC. 390, 392, 231, 323, 421, and 495.

The Food Service Program prepares its graduates to become dietitians or supervisors in schools, industrial, commercial, or institutional food service operations. The content of this program relies heavily on technical courses in food and nutrition, psychology, personnel management, and related sciences including microbiology. Required courses recommended for the first four semesters are: Chem. 101 and 102, Bio. 101, Psy. 101, Soc. 111, Ma. 107, Bio. 332, Psy. 230, Ed. 302; HEC. 100, 101, 111, 121, 131, 215 and 216. Other courses in food service curriculum include: Chem. 201, HEC. 232, 323, 391, 410, 417, 418, 419. The following courses may be taken at another institution until they are offered at Mansfield: Quantity Food Preparation and Marketing, Institution and Personnel Management, and Institutional Equipment.

The Consumer Service Program, with its two options, is selected by home economics students who plan to become home economists in business. Completion of the Food and Equipment option leads to employment as home economists or consumer specialists by food or household equipment manufacturers, by public utility companies, or by agencies serving the consumer. These students concentrate in the area of food and equipment, supported by course work in chemistry, physics, psychology, business practices, economics and sociology. Required recommended courses for the first two years of the Food and Equipment option include: Psy. 101, Bio. 101, Chem. 101 and 102, and Ed. 302; HEC. 100, 101, 111, 121, 131, 215, 216, and 321. Other courses in the Consumer Service — Food and Equipment option include: Phy. 130, Econ. 102, Art 241, Eng. 230 and 240, CIS 110, Ed. 420, Spc. 201, Bus. 120 and 330, HEC. 323, 410, 416, 417, 418, 421 and 429.

Students selecting the Consumer Service — Clothing and Textiles option are prepared for entry-level positions in merchandis-

ing and with clothing manufacturers, pattern companies and other companies producing items used in clothing construction. Clothing and textile courses including tailoring, flat pattern design, creative draping, and textile analysis constitute the specialized home economics courses in this option. Supporting courses include art, journalism, photography, business, and sociology. Required courses recommended for the first two years of the Consumer Service — Clothing and Textiles option include: Psy. 101, Bio. 101, Chem. 101 and 102, Soc. 111, Art 241, Bus. 120, HEC. 100, 101, 111, 121, 131, 201, 305 and 321. Other courses in the option include CIS 110, Art 342, Ed. 420, HEC. 302, 303, 304, 323, 403, 404, 405, 409 and 416.

The Child and Family Services Program offers to the student an overview of the total human life span from conception through old age. Courses include study in child development, family relations, agencies serving families and children, adolescence, aging, psychology, sociology, and biology. In addition, each student may select an emphasis for in-depth study in early childhood education and child development; family relations and counseling; or child and family agencies.

The student in this program will have varied opportunities for observation and participation in field experiences with individuals and families. During the senior year the student will devote one semester to participation in a social agency to obtain professional experience in the field.

Opportunities for employment range from day care and early childhood education to services for the elderly, with others being in family counseling and child and family agencies. The student is encouraged to carefully plan with an advisor the selection of courses of general education and electives to complement the student's interests and employment goals.

Required courses recommended for the first four semesters include: Bio. 101, Psy. 101, Sp. Ed. 101, and Soc. 111 or 121; HEC. 100, 101, 111, 121, 131, 231 and 232. Other courses in the Child and Family Services Program include HEC. 216, 321, 323, 330, 332, 333, 334, 336, 436 and 439.

Home economics students, having achieved a B average, may elect to spend one semester or a summer during the junior or senior years at the Merrill-Palmer Institute of Human Development and Family Life in Detroit, Michigan.

Students transferring into the Home Economics Program at Mansfield will have their transfer credits evaluated in terms of the program in effect at Mansfield, and they may be advised to enroll in courses which will develop competency for becoming professional home economists.

MATHEMATICS

The Department of Mathematics offers two undergraduate programs in mathematics. The Bachelor of Arts (B.A.) program in mathematics is designed to prepare the student for mathematics positions in business, industry and for graduate work in mathematics or related fields. The Secondary Education (B.S.E.) program in mathematics provides strong preparation in mathematics to enable the student to enter the teaching profession and to study mathematics at the graduate level.

Mathematics majors in the B.A. program are required to take the following courses: MA. 140, 141, 160, 240, 241, 260 and 280 plus seven mathematics elective courses at the MA. 304 level and above.

The Mathematics Department offers a sequence of courses leading to the B.S.E. degree for those students desiring to enter the teaching profession. The courses offered in the B.S.E. degree program are mathematically sophisticated and are also generally open to students pursuing the B.A. degree. These courses are designed to (1) provide preparation for teaching of all courses in the modern high school mathematics curriculum, (2) enable the student to develop basic understanding in many facets of mathematics, (3) provide adequate background in the "main stream" of contemporary mathematics so that the student can further explore areas of his own interest, and (4) provide the background necessary for the study of mathematics at the graduate level. In short, students who complete the teacher education major at M.S.C. are equipped to provide leadership in the teaching profession and to enjoy success in further study of mathematics in graduate schools commensurate with their abilities and interests.

Required mathematics courses for the B.S.E. degree in mathematics are: MA. 141, 142, 160, 241, 242, 260, 280, 304, 329, 361 plus four mathematics elective courses at the MA. 304 level and above.

If preparation in algebra and trigonometry is not adequate to permit the student to proceed immediately to Math. 141 Calculus 1, he must complete Math. 130 Algebra and Trigonometry in addition to the courses listed in the required courses for the major.

A student wishing to transfer to Mansfield from another college should take the equivalent of as many as possible of the following courses during his freshman and sophomore years: MA. 141, 142, 160, 241, 242, 260, and 280. If a transfer student has completed 12 credits of calculus and 3 additional credits of mathematics at the calculus level or above, he can proceed through the mathematics program at M.S.C. without loss of time.

COMPUTER SCIENCE EMPHASIS

By making appropriate use of his electives hours, a student majoring in mathematics may emphasize computer science. Such a student should elect the following courses:

CIS 310 Intro to System Analysis
CIS 325 Operating and Programming Systems
CIS 230 Language and Structure of Computers
MA 317 Optimization Techniques
MA 310 Numerical Analysis

Other appropriate courses may be elected from the following:

CIS 105 Programming and Information Processing
CIS 110 Intro to Accounting
CIS 225 Automated Accounting Systems
CIS 215 Managerial Accounting
CIS 480 Operations Research
MA. 311 Differential Equations I
MA. 312 Differential Equations II
MA. 324 Applied Mathematics

MUSIC

BACHELOR OF SCIENCE IN MUSIC EDUCATION

The Bachelor of Science degree in Music Education is designed to develop public school music teachers who are intelligent and competent musicians, well-trained and competent educators, and well-informed citizens. Although the program is general in nature, preparing the graduate to teach both vocal and instrumental music at all levels of the public school, opportunity is given the individual student to specialize in either vocal or instrumental area, thereby meeting the need of the public school systems in their demand for specialization. The program attempts to provide a balance between general education, the intensive training necessary to develop a professional musician, and the background of professional study and experience necessary for entering the field of education in today's society.

BACHELOR OF MUSIC

The Bachelor of Music degree provides the initial collegiate study for the development of the skills, concepts, and sensitivity essential to the preparation for the professional life of a musician. After successfully completing the degree, the graduate will have completed an important step in his development as a performer, composer, and/or as a teacher in the area of his particular major competency. The program does not result in certification to teach in public schools, although by extending study beyond the normal eight semesters and by careful advisement, certification may be secured.

Bachelor of Music candidates may major in piano, organ, voice, stringed instruments, woodwind instruments, brass instruments, percussion or music theory, history and literature.

The Bachelor of Music program is intended for students of superior musical ability. All applicants must demonstrate a high level of proficiency in performance, and accordingly will be required to pass an entrance audition in their major applied area. General scholarship, health and character requirements will be in accordance with existing college admissions policies.

Students who wish to enter the B.M. degree program with advanced standing from other programs at Mansfield State College will be expected to demonstrate the competencies and proficiencies which are appropriate to the level of the particular program for which they wish to be considered.

BACHELOR OF ARTS

The Bachelor of Arts degree with a major in Music is designed to provide a liberal education and a musical background sufficient for entering those occupations allied to the musical world. For those who are not vocationally oriented, it provides an education in music sufficient for the enrichment of life which such knowledge of the art can bring.

SPECIAL ADMISSIONS REQUIREMENTS

All applicants for a music degree, once they have satisfied the requirements for general college admission, must take an audition for acceptance into the music degree program. Acceptance is based upon a demonstration of both musical aptitude and musical accomplishment.

Musical aptitude is judged by —

1. The ability to sing in tune.
2. Rhythmic responsiveness.
3. Adequate melodic and rhythmic memory.

Musical accomplishment is measured by —

1. Sufficient proficiency on either Voice, Piano, Organ, Violin, Viola, Cello, Bass, Flute, Oboe, Clarinet, Bassoon, Saxophone, Trumpet, Horn, Trombone, Euphonium, Tuba, or Percussion to study standard literature. Voice majors should choose songs from standard vocal repertoire, chosen to display vocal potential as to range, voice quality, and interpretive ability. Instrumental majors should be prepared to play one or two compositions from standard literature showing contrasting styles plus selected scales and arpeggios. Sight reading is an integral part of each audition.
2. The ability to sing at sight a simple folk song type melody.
3. The ability to sing an alto, tenor, or bass part to a song equal in difficulty to "America."
4. The ability to play piano music, at sight, to the degree of difficulty of the first book of a standard graded course of piano instruction.
5. A working knowledge of the fundamentals of music theory

such as scales, key and time signatures, and the terms and symbols of music notation.

Applicants who show superior qualifications on their major instrument may be accepted with a deficiency in one of the other areas, but will be expected to remove the deficiency within one school year.

Special permission to audition by a tape recording may be granted in unusual circumstances where long travel or personal hardship is involved. For information concerning this type of audition, contact the Chairperson of the Music Department.

Transfer Students

Due to the time sequence necessary for the development of skills required by the music curriculum, students transferring into music are advised to transfer as early as possible. Otherwise, it becomes increasingly difficult to complete the curriculum within the normal four-year span of time.

Transfer credits in the music area must be validated by examination before they may be accepted for transfer. This is to insure that the student is capable of successfully completing the remaining courses which will be required of him/her.

BACHELOR OF MUSIC IN MUSIC THERAPY

A career in Music Therapy offers challenge, opportunity, and special rewards to those interested in working with the handicapped. Children and adults who need therapy because of behavioral, learning, or physical disorders are helped by the use of music. Rehabilitation through the skill of a music therapist is needed in various places such as mental hospitals, geriatric centers, day care facilities, community health centers, and in the work of special service agencies. Public schools are beginning to hire music therapists as members of special education staffs, especially those who hold music education certification. Some registered music therapists also open their own private studios where they work with children and adults who are referred to them by psychiatrists and other health professionals.

The Music Therapy program is a professional curriculum, the purpose of which is to prepare students to qualify as registered music therapists. This result is achieved through 4 years of academic residence and 6 months of internship under the supervision of a registered music therapist. At the same time, each student in this program will take a selection of general courses designed to broaden his intellectual horizons and to help create an informed, educated, and responsible citizen.

The requirements of this curriculum are as follows:

A. Core Requirements:

PROFESSIONAL COURSES

MTH 370, 371, 372, 471, 472, 475, SPED 101.

MUSIC COURSES

Applied Major, MUS 111, 112, 213, 214, 131, 132, 331, 122, 123, APMU 101, 102, 111, 210, 113, 114, 151, 160, MUS 311.

B. Cognate Course Requirements:

1. Sociology-Anthropology
ANTH 101, SOC 101, 121.
2. Psychology
PSY 100, 360.
3. Biology
BIO 101, 332.

Music therapy students must meet the general education requirements as established by all-college policy.

PHILOSOPHY

In a technologically oriented world, an enlightened society requires more than impressive machines to achieve the good life. It requires people whose powers of reasoning enable them to make intelligent and sensitive choices about their lives. Philosophy is geared to address such needs. Philosophy is neither a body of established facts nor a group of dogmatic truths, but a set of skills which may sharpen an individual's powers to think more critically about the basic beliefs of his world. By helping students recognize and appreciate the major problematics and ideas with which the discipline has been traditionally concerned, philosophy develops one's ability for logical reasoning and analysis, tools latent within every person's mental capacities, and it provides a background to help all students to understand and evaluate intelligibly their contemporary world with its own, complex problems.

The Department of Philosophy currently offers a major program leading to the B.A. degree in philosophy. It offers a sound foundation for graduate studies both in philosophy and in other professions, especially law, business, and management, as well as in any career program interested in individuals who can think logically (e.g. computer science). A B.A. degree in philosophy also offers an excellent basis for students interested in religious studies and the ministry.

The major program requires 30 semester hours of philosophy courses beyond Phil. 201. Required in these 30 hours are Phil. 420, 421, 422, 423. Any other philosophy courses will satisfy the remaining hour requirements. Majors considering graduate studies in philosophy are strongly advised to acquire elementary reading facility in French or German. It is also suggested that majors take related courses outside the department pertaining to their specific areas of philosophy interest. A non-major emphasis in philosophy consists in any combination of 15 hours in philosophy.

PHYSICS

The Bachelor of Arts program in Physics is designed around a core curriculum of required physics and mathematics courses. Additional requirements depend on the career orientation of the individual. With this broad liberal arts education, the physics major can continue his education in such areas as bio-physics, operations research, technical sales and marketing, oceanography, industrial and federal management and, of course, the research physicist of the Masters and Ph.D. level.

Physics majors are required to take the following courses: Math. 140, 141, 160, 240, 241, 311, plus 1 elective mathematics course; Phys. 188, 211, 212, 311, 315, 316, plus 6 elective physics courses at the 300 or 400 level.

For students intending to pursue graduate work in physics, it is advisable to take additional courses in physics and mathematics beyond the minimum requirements. Students intending to pursue careers in physics-related professions should select electives that will best prepare them for their chosen careers.

Secondary education physics majors are required to complete the following: Math. 140, 141, 240, 241; Phys. 188, 211, 212, 311, 315, 316 and one elective physics course at the 300 or 400 level.

This minimal core-curriculum allows the student to broaden his science background along with other interests and according to relevant topics of the times.

POLITICAL SCIENCE

The Department of Political Science offers a general background in the field of American Politics, comparative politics, international relations, public administration, and political theory, leading to the Bachelor of Arts degree. Courses in the department may be elected for general education credit. The Political Science major offers a challenging course of study for students who will plan to play an active role in shaping public affairs. The program is designed to offer a combination of specialization in the major field with a broad general education. In combination with other fields of study, the program assists in the preparation of students who are interested in careers in law, public administration, local government, urban affairs, teaching, foreign service, public opinion research and journalism.

The department presently has two programs: one leading to the B.A. in Political Science and one B.S.E. Social Studies comprehensive-political science emphasis. Each of these programs has different requirements. The department has prepared an advisement manual which is available on request from the department chairperson.

The bachelor's degree is to be regarded as a stepping stone for careers and further education. In addition to the courses in the Political Science major, students should elect courses in the other social sciences and courses consistent with their career interests. A departmental advisor will assist students in planning a program to meet specific needs. Those students planning to attend graduate school should consult the requirements of the schools to which they plan to apply.

PRE-ENGINEERING

Pre-engineering combines a liberal arts education in the physics department with a technological education at one of the cooperating engineering universities. The first three years of pre-engineering courses are completed in the physics department and the last two years at one of the cooperating institutions. The student earns two degrees: a B.A. from M.S.C. and B.S. from the cooperating school.

This program allows a student, whose decision between engineering and science is not yet made, to find his/her appropriate aptitude without any loss of college time. It also provides a liberal arts program that assures qualified students acceptance into an engineering school when applications may exceed capacity.

Students successfully completing the first 3 years in the physics department may choose among the following degree programs at the cooperating engineering institution: aerospace, agriculture, ceramic, civil, chemical, electrical, environmental, industrial, mechanical, metallurgical, mining, nuclear, petroleum and natural gas or engineering science.

All pre-engineering students take the physics major core curriculum Physics 188, 211, 212, 311, 315 and 316 and Math 140, 141, 160, 240, 241 and 311. Additional courses at MSC depend on which engineering program the student selects.

PSYCHOLOGY

The Department of Psychology stresses the need for a broadly based background through the liberal arts disciplines. Majors are required to complete certain courses within the discipline, and the remaining hours in both the lower and upper divisions are viewed as free electives. The choice of all remaining courses should be based on the individual student's interests and motivation.

Students are encouraged to consult with their departmental advisors for help in selecting courses.

Two degree programs, Psychology and Human Relations, are available.

In order to insure a sound background in behavioral science, the following core courses are required of both psychology and Human Relations majors: Psy 150, 290, 291, 495 or 497, and MA 105.

B.A. IN PSYCHOLOGY: Research emphasis provides preparation for master's or doctoral level study in Psychology. People who complete a doctoral program may ultimately be involved in activities that are primarily academic, research oriented, or professional.

In addition to the core of courses, the following are required of Psychology majors: Psy 250, 251, 350, 351, 491. Psychology majors are also required to select one of the following laboratory courses: Psy 460, 461, or 462.

B.A. IN HUMAN RELATIONS: Applied emphasis provides the student with an appreciation of the complexity of human behavior and specialized experiences preparatory to immediate employment in a variety of human services settings including drug and alcohol abuse, treatment centers, diagnostic services, personnel offices, mental health and mental retardation facilities, and the justice system.

In addition to the core of courses, the following are required of Human Relations majors: Psy 200, 201, 300, 301, 490. Human Relations majors are also required to select at least three of the following: Psy 211, 212, 323, 310, 311, 312, 320, 321, 322, 330, 410, 430 and 462.

Students in both programs have the option of doing Independent Study or, if qualified, of spending a full semester (or summer) in a field setting (Pre-Professional Experience) obtaining practical job experience and applied skills. The experiences focus on beginning professional skills, community services, and research work in settings appropriate to the students' interests and professional orientation such as child guidance settings, mental hospitals, probation offices, and industrial or governmental agencies, under supervision by qualified staff. This gives the student an opportunity to translate theoretical learning into practical application. Oftentimes, students obtain employment in the same agencies after graduation.

Human Relations majors also find ready acceptance into a wide range of related graduate programs such as community mental health, special education, counseling and guidance, vocational rehabilitation, and social work.

The Psychology Department also has established specialty tracks that serve the interests of its majors and those from other disciplines, e.g., human development (Psy 105, 290, 320, 321, 322, 323), social behavior (Psy. 211, 212, 310, 311, 312, 410, 461), and helping skills (Psy. 201, 211, 300, 301, 430, 462).

GRADUATE PROGRAMS: The Department has recently developed a program in the area of Community Psychology (rural mental health). Contact Coordinator, Psychology Graduate Program.

PUBLIC SCHOOL NURSING

The Public School Nursing Program, under the aegis of the Department of Secondary Education, leads to the degree of Bachelor of Science in Education and is designed to provide the necessary preparation for a registered nurse seeking certification to serve in public schools of Pennsylvania.

Believing that the school nurse is primarily a teacher-nurse, stress in the program is given to the development of competent educators and informed citizens. Admission to degree candidacy reflects: (1) the satisfactory completion of a three-year curriculum in an approved school of nursing, (2) registration by the State Board of Examiners for the registration of nurses of Pennsylvania, (3) completion of an approved program at the College of sixty-seven semester hours of additional work as detailed below. *Completion of the program and endorsement by the College will result in an Education Specialist I Certificate.

Nurses in the program are being prepared to work in public schools where they must work with administration, faculty, parents, students, and community. Therefore, those responsible for the program at the College believe they need much the same general education background as all education majors. There is a conviction that the general education, professional education, and specialization courses required in the program will enable the student to complete a strong program of preparation for Public School Nursing.

*Required courses include the following:

In General Education, Spe 101, Eng 230, one literature course, Hist 104, Psy 360, Ma 105, and Soc 111. In Professional Education, Ed 401, Psy 230, Psy 240, Ed El 350, Sp Ed 101, PSN 206, PSN 307, and PSN 306. In PSN Specialization, PSN 300, PSN 301, PSN 302, PSN 304, PSN 305, H Ec 111, and PSN/BIO 309.

For further information regarding the Public School Nursing Program, contact:

Mr. Leslie Evans, Chairman
Department of Secondary Education.

SECONDARY EDUCATION

The Secondary Education Curriculum has as its primary purpose the preparation of men and women to teach in secondary schools. It offers a broad-based general education supported by the principles of student choice, advisement, and distribution among disciplines. This provides prospective teachers with a variety of experiences geared toward developing an appreciation of the process of education.

Completion of requirements for the Bachelor of Science in Education degree, with emphasis in secondary education, indicates that the prospective teacher is competent in his knowledge of content in the four major components of the secondary curriculum: general education, area of specialization, professional education, and field experiences.

The Secondary Education Curriculum is a four-year program leading to the Bachelor of Science in Education degree. This curricular function is the combined responsibility of the Secondary Education Department and the appropriate academic departments. Therefore, each student who is a secondary education major functions under a system of dual advisement. Under this system, an adviser from the Secondary Education Department assists the student in satisfying completely, his certification, while an adviser from his chosen discipline guides him in his area of specialization.

The curriculum consists of four components: general education, area of specialization, professional education, and field experiences.

General education has as its goal a broad-based liberal education designed to foster individual fulfillment and to prepare citizens for active participation in a democratic society. Students may select courses from five groups: humanities, foreign language, science, mathematics, and social science. Each student elects twelve hours in each of three different groups and two courses in a fourth group.

Area of Specialization has as its goal a concentration of courses designed to provide a student with depth and expertise in a specific subject area. This component is the primary responsibility of the academic departments, and programs are developed by interdepartmental cooperation.

Professional education has as its goal the preparation of teachers, the science and art of pedagogy. This component, the sole responsibility of the Secondary Education Department, reflects the necessity of interdepartmental and interdivisional cooperation. Courses relating to schools as social institutions, characteristics of learners and learning, and understanding teaching methodology are offered.

Field experience has as its goal the application of knowledge and skills acquired in professional preparation. The Secondary Education Curriculum offers observation and participation in several dimensions, culminating in a semester of student teaching.

A student who completes the program will graduate with a provisional certificate to teach in the secondary schools of the Commonwealth of Pennsylvania.

Certification programs include communication arts (speech/English); English; foreign language (French, German, Spanish); mathematics; physics/mathematics; science (biology, chemistry, earth and space, general, physics); and social studies comprehensive which provides emphases in geography, history, political science, and sociology/anthropology.

While pursuing general education during their first two years, students who desire professional training toward certification to teach in the public schools of the Commonwealth of Pennsylvania must meet the following prerequisites for admission to professional studies upper division:

1. Speech screening for impediments and articulation problems. Screening procedures will be administered annually during freshman orientation or first or second semester of the freshman year.
2. Enrollment in the Secondary Education Professional Experiences Program (SEPEP), beginning with the freshman year.

Students possessing an Associate Arts degree from an accredited institution and matriculating at Mansfield State College with junior status will be granted basic credit in the general education program.

However, all prerequisites leading toward certification must be met prior to program completion. Under normal procedures transfer students should complete their certification program with two years of study at Mansfield State College.

In general, any student who is eligible to continue in the college will be admitted to his chosen major if his academic performance, as measured by grade point average, is above the minimum required for passing. This includes oral or written expression; psychological, sociological, and philosophical studies; and those courses explicitly designated for specialization in the chosen academic major. Consideration will also be given to social reports of personnel deans, interview procedures, and department testing requirements.

The professional sequence for all Secondary certification programs include the following twenty-nine semester hours: Ed 111, 211, Psy 230, Ed 300, 301, 302, 311, 401, 411, and 400.

For information concerning requirements in the areas of specialization, the following chairpersons may be contacted:

Biology — Dr. Charles Weed — 169 Grant Science Center
Chemistry — Dr. Arnold George — G18 Grant Science Center
English — Dr. John Saveson — 115 Belknap Hall
Foreign Language — Mr. William Bogart — 114 Belknap Hall
Mathematics — Mr. Owen Clark — 206 South Hall
Physics — Dr. George Mullen — 145 Grant Science Center
Social Studies Comprehensive — Mr. Leslie Evans — 111 Retan Center
Speech and Theatre — Dr. Vernon Lapps — 310 South Hall

SOCIOLOGY AND SOCIAL WORK

To assist young people to gain an overall understanding of how American society works today and what its future portends for them are the primary goals of this department. To develop in them a world perspective and an acute awareness of mankind's critical social problems are complementary goals.

The B.A. program in Sociology provides a wide latitude for individual programs of study. At the core are five required courses (SOC 111; ANTH. 111, 304; SA 412 or 421, 451). Five electives from other Sociology and Anthropology courses complete the thirty hours of specialization for the major. While a student may choose a broad, general program, he may emphasize Anthropology, Sociology, or Social Work.

Students are counseled to plan their college studies specifically including vocational and intellectual dimensions. Sociological and Anthropological courses provide a foundation for a variety of professions. Among these are social worker, social studies teacher, professor, lawyer, minister, journalist, and specialists in community development, city planning, or social research. Programs combining a major in this department with supplementary work in the applied areas of education, home economics, criminal justice or psychology are possible.

A unique feature of the work offered in the Department of Sociology and Social Work is the emphasis on learning about social relations by studying them directly in the community. Field studies in small rural Appalachian communities are an integral part of the program. Several courses combine community observations or work with classroom lecture-discussions; the Organizational internship allows students the opportunity to completely involve themselves in a work role for an entire semester.

The B.S. program in Social Work prepares students for beginning professional practice. It is built on and integrated with a liberal arts base that includes knowledge in humanities, social and biological sciences. To meet the educational objectives of the program, the curriculum is divided into six basic areas. Each area includes a core of required courses:

Social Welfare and Human Services — SWK 121, 241, HIST 315
Human Environment and Social Environment — ANTH 101, SOC 111, BIO 101, GEOG 102, PSY 101
Social Work Practice Area — SWK 449, 450, 451
Information Processing and Organizational Dynamics — CIS 101, SOC 203
Research — SOC 303, MA 105
Field Instruction — SWK 441

SPECIAL EDUCATION

This program is designed for the professional preparation of competent Special Education teachers for children who are exceptional. The program leads to a Bachelor of Science in Education Degree and K-12 teacher certification in Mentally and Physically Handicapped (M/PH). The M/PH certification provides entry-level qualifications for teaching the brain injured, learning disabled, mentally retarded, physically handicapped, and socially-emotionally disturbed.

The program is competency-based and considers the cross categorical trend in Special Education, rather than focusing on specific handicaps. It develops generic teaching competencies for working with mentally and/or physically handicapped children in various educational settings.

Students major in Mentally/Physically Handicapped and choose 10 S.H. of related electives in such areas as Early Childhood, Elementary, or Secondary Special Education, Disadvantaged, and Severely/Profoundly Retarded. Cognate studies are also possible in Mentally Gifted and Psychology. Upon meeting the competency criteria in the program, graduates will be qualified for such professional positions as:

- Special Class Teachers
- Resource Room Teachers
- Itinerant Specialists
- Home Instruction Teachers

Graduates also go into related settings in institutions and agencies serving the handicapped, or advanced graduate study in Special Education or related fields.

The curriculum develops competencies needed in appraising the nature and origin of learning problems among exceptional children and youth. It considers appropriate school adjustments needed for these children and youth with emphasis on diagnostic and prescriptive teaching skills. New legislation and individualized education programming are focal points in the program. To enhance the theoretical phases of the curriculum, provisions are included as early as the Freshman/Sophomore year for students to get observation and field experience in such special education settings as the following:

- Intermediate Unit 17 Special Classes
(Bradford, Lycoming, Sullivan, Tioga Counties)
- Northern Tier Learning and Diagnostic Center
Martha Lloyd School, Troy, Pennsylvania
- The Laurelton and Selinsgrove Centers
- Partners in Progress Sheltered Workshop
- The Elmira Psychiatric Center

Lower division students tentatively interested in this major should include the following in their first two years of General Education: Psy. 101, 230, SpEd 100, 101, 201, and, with advisement, any elective courses related to specific areas of interest. Curriculum requirements for the major are as follows:

SpEd 100, 101, 201, 301, 302, 303, 340, 345, 400, 410, and 490. Plus 10 S.H. of Major/Major Related Electives.

The program also offers elective courses to students in other majors in order to provide prospective teachers and others with a working orientation to handicapped children who must be provided for (Mainstreamed) in regular elementary and secondary classrooms and related settings. Included are such courses as SpEd 101, 301, 310, 320, 330, 340, 360, and 490. Paraprofessional (teacher aide) training projects are also provided by the department. Course options are also available for those wishing to work in child advocacy, group homes, MH/MR, and sheltered workshops.

Generally, junior college and other advanced transfer students may be sequenced into this major with a minimum of difficulty. Interested transfer students should contact the department chairperson for an evaluation of their transcripts and further information.

SPEECH COMMUNICATION AND THEATRE

THE COMMUNICATIONS PROGRAM at Mansfield State College is about people learning to understand themselves and others. Most of the problems facing the world today stem from a lack of effective communication. While solutions to these problems seem complex, they are possible when people learn how to communicate more effectively.

The Department serves four basic groups of undergraduate students:

1. Those who plan to go on to graduate work.
2. Those who plan to teach and direct Speech, Theatre, and English activities in the secondary school.
3. Those who wish a sound basic training in the area of communications or theatre who intend to pursue a career in activities related fields of speech, broadcasting, theatre, or public relations.
4. Those who are simply in Speech, Communication and/or Theatre as a humanistic discipline just as they might major in English or History.

Students may earn either Bachelor of Arts or the Bachelor of Science in Education degree depending upon their course of study. The career possibilities are varied and abundant. One possibility is teaching in the secondary schools. It is required that any level student who plans to teach within the discipline on the secondary level must pursue the special course of study leading to certification in communications. Approved certification indicates that the recipient is qualified to teach Speech, Theatre, and English courses. Beyond the profession of teaching, career possibilities abound. Broadcasting, journalism, editing, sales, public relations demand direct application of communication skills. Many companies and corporations seek specialists with communications backgrounds. The specific skills stressed in communications programs are needed by almost all fields of employment.

THE SPEECH CORE PROGRAM FOR B.A. consists of 15 credit hours of required courses including Public Speaking, Oral interpretation, Voice and Articulation, Argumentation and Debate, and Communication Theory. Students who wish to pursue an emphasis in broadcasting within the Speech Communication major should take 24 credit hours of courses including Mass Media, Television Production, Television Program Design, Radio Production and Management, Voice and Articulation, and Communication Theory, as well as specified writing courses such as Journalism, News Reporting, etc.

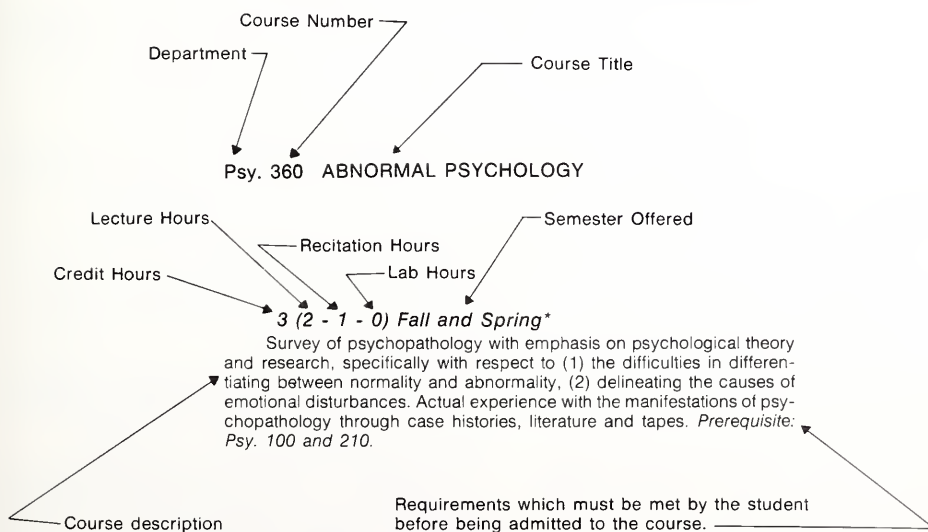
Students who elect the Public Relations emphasis will take Mass Media, Journalism, Media Design, Public Speaking, Photography, Intro to Public Relations, Public Relations, Public Relations Workshop, Communication Theory, and Persuasion.

The Theatre Core Program for the B.A. consists of 22 credit hours of required courses including Stagecraft, Acting, Makeup, Directing, Theatre History, I and II, Play Structure, Analysis and Theatre Workshop.

The BSE Communications requires 6 hours of theatre, 21 hours of speech, and 24 hours of English courses; nine of which are restricted electives. Students in the BSE program are also required to take 30 hours of education courses, 12 of which are a structured teaching experience. It is required that these students also demonstrate second year proficiency in a foreign language.

COURSE DESCRIPTIONS

EXPLANATION OF COURSE DESCRIPTIONS



* An asterisk used here would signify courses which are offered irregularly, infrequently or when staff is available.

ANTHROPOLOGY

ANTH 101 CULTURAL ANTHROPOLOGY

3 (3-0-0) Fall and Spring

Introduction to culture as a conceptual model and to the variations in behavior systems found among human societies. Cultural institutions are examined including the processes associated with their development and change.

ANTH 102 HUMAN ORIGINS AND EVOLUTION

3 (3-0-0) Fall and Spring

Study of the development of man with attention to human variation. Techniques involved in the discovery, reconstruction, and the classification of man are treated. Provides an introduction to physical Anthropology including prehistoric archaeology.

ANTH 301 WORLD CULTURES

3-0-0 Summer, Fall or Spring

Comparative study of the major cultural areas of the world. Institutional patterns characterizing the cultural complexes of Europe and Southwest Asia, South Asia, Southeast Asia, North and South America and Africa south of the Sahara will be examined.

ANTH 304 STUDIES IN MAJOR CULTURAL SYSTEMS

3 (3-0-0) Fall or Spring

Systematic examination of the cultural system of a major society. Dominant institutional norms, values, and modes of social organization are treated as parts of an integrated system. Course may be repeated for different cultural systems. Currently offering Studies in Middle East Culture. *Prerequisite:* ANTH 101.

ANTH 430 FOREIGN AREA FIELD STUDY

2-8 Summer or Intersession

Supervised field observation of selected aspects of human group activities in one cultural area. Study may be a broad survey of kinship, education, religion, work and governmental patterns or an intensive study of a single institution. Currently offering Field Study of Puerto Rico. *Prerequisite:* ANTH 101 or SOC 111 and/or permission of instructor.

ART

ARTH 101 INTRODUCTION TO ART

3 (3-0-0) Fall and Spring

A study of representative works of art through the ages for both increased aesthetic perception and deepened awareness of universal human experience.

ARTH 102 SURVEY OF ART

3 (3-0-0) Fall

An intercultural and interdisciplinary approach to the dominant movements and ideas as they evolved in the visual arts from the first evidence of western man's origin to the twentieth-century.

ART 201 PAINTING

3 (1-0-5) Fall and Spring

Introduction to the methods, techniques and approaches of the painter. An emphasis is placed on composition, application and involvement in creative self-expression. Stress is placed upon the understanding and use of the media for solving various problems of representation.

ART 210 DRAWING I

3 (1-0-5) Fall and Spring

Drawing is stressed to build those skills and attitudes for the remainder of the program. It is an introduction to the two and three-dimensional aspects of drawing. The course will stimulate creative thinking, develop a sensitivity to the art elements and sharpen impressions in the visual memory.

ARTH 220 PRIMITIVE ART

3 (3-0-0) Spring

The study of prehistoric and primitive art from the Paleolithic Period: Africa, Mexico, Europe, the Americas, Asia, Australia and the South Seas. *Prerequisite:* ARTH 101 or 102.

ARTH 221 ANCIENT AND MEDIEVAL ART

3 (3-0-0) Alternate Semesters

A comprehensive study of architecture, sculpture, painting and minor arts from the prehistoric through the Gothic period; emphasis on aesthetic values and historical implications, iconographic and symbolic significances. *Prerequisite:* ARTH 101 or 102.

ARTH 222 ART OF THE RENAISSANCE

3 (3-0-0) Alternate Semesters

A comprehensive study of architecture, sculpture, painting in Italy, Flanders, Holland, Germany, England, France and Spain, with emphasis on the general characteristics of the Renaissance. *Prerequisite:* ARTH 101 or 102.

ARTH 225 HISTORY OF MODERN ART

3 (3-0-0) Fall and Spring

A comprehensive study of the development of modern art from nineteenth century neo-classicism through contemporary movements. *Prerequisite:* ARTH 101 or 102.

ARTH 226 ORIENTAL ART

3 (3-0-0)

A study of art in India, China, and Japan, in the areas of painting, sculpture, architecture, pottery and the minor arts. *Prerequisite:* ARTH 101 or 102.

ARTH 227 HISTORY OF PRINTS

3 (3-0-0)

The study of the history of printmaking and the significant influences of the Eastern and Western cultures on the graphic processes. *Prerequisite:* ARTH 101 or 102.

ARTH 228 HISTORY OF ARCHITECTURE

3 (3-0-0)

A study of architecture, styles, and methods of construction, from the earliest civilization to the present. *Prerequisite:* ARTH 101 or 102.

**ARTH 229 HISTORY OF BLACK AND AMERICAN
INDIAN ART
3 (3-0-0)**

The course will survey the Art of Africa from the ancient kingdoms of Ife and Benin to contemporary Africa. It will also be the aim of this course to note the impact of Black Art on European Art as developed through the conscious use made of its idiom by early 20th century European artists: Picasso, Braque, Derain, Vlaminck, Moore, Modigliani, Brancusi. The course will also appraise the past and present performance of the Afro-American artist and explain the Black artist's connection with African art as the Ancestral Arts.

**ARTH 230 HISTORY OF AMERICAN ART
3 (3-0-0)**

A comprehensive study of the heritage of American Art from the Limners and artisans of colonial times through the 20th century in painting, architecture, and sculpture; emphasizing movements, trends, and contributions by significant artists, architects, and sculptors. *Prerequisites:* ARTH 101 or ARTH 102.

**ARTH 231 GRAPHICS I
3 (1-0-5) Fall and Spring**

An introduction to the print-making processes of linocut, woodcut, lithography, serigraphy, etching, intaglio and drypoint with emphasis on their use for creative expression.

**ARTH 241 COLOR AND DESIGN
3 (1-0-5) Fall**

An introductory course in design for all art majors. Stress is placed on the creative use of colors and basic elements of design emphasizing their function and relationships through discussion and assigned problems. Introduction to types of harmony, sequence and balance while applying methods of design and representation through the use of various media.

**ARTH 251 JEWELRY I
3 (1-0-5) Fall and Spring**

A study of two and three dimensional design concepts, with emphasis on individualized solutions in the medium of metal. Both precious and common materials will be used. Traditional techniques of jewelry making will be explored.

**ARTH 261 WATER BASE MEDIA I
3 (1-0-5) Fall and Spring**

An investigation into the waterbase media, transparent watercolor, gouache, acrylic polymer.

**ARTH 271 CERAMICS I
3 (1-0-5) Fall and Spring**

Study of hand and wheel methods of forming. Introduction to the principles of glaze formulation; kiln stacking and firing.

**ARTH 281 SCULPTURE I
3 (1-0-5) Fall and Spring**

An exploration of three dimensional design as related to sculpture. Basic techniques of stone and wood carving will be explored in addition to various methods of material build ups (wood, plaster, plexiglas, metal, etc).

**ARTE 288 HISTORY AND PHILOSOPHY OF
EDUCATION AND ART EDUCATION
3 (3-0-0) Spring**

The purpose of this course is to acquaint the student with social, historical and philosophical development in education and art education specifically.

**ARTE 290 ART EDUCATION IN ELEMENTARY
TEACHING
3 (2-0-4) Fall and Spring**

A pre-student teaching experience in which each student prepares lessons and teaches children in the pre-school age through the fifth and sixth grades. The course not only involves the science of teaching but also the organization of a program in Elementary Art. Other activities include field trips, observations and participation in nearby public schools. The program takes place on Saturday morning.

**ARTE 292 ART IN THE SECONDARY SCHOOL
3 (4-0-6) Fall and Spring**

A practical introduction to Secondary School methods. Emphasis for the course evolves from practical daily classroom participation. It is through this practical experience that the college student is introduced to classroom procedures, class and lesson organization, school organization, problems in developing learning units, co-curricular activities, team teaching, structured and unstructured approaches, introduction to use and care of supplies and materials and those problems concerning the art teacher in the total school situation. *Prerequisite:* ARTE 290.

**ARTE 294 CURRICULUM DEVELOPMENT IN ART
EDUCATION
2 (2-0-0) Fall and Spring**

An investigation of the concepts, attitudes, and values of art theory and practice as related to curriculum; a study of classroom problems and procedures in various teaching situations.

**ART 295 PLASTIC AND TACTILE CRAFTS
3 (1-0-5) Spring**

The purpose of the course is to have the student become more receptive to the three dimensional media and materials.

**ART 298 PUPPETRY I
3 (1-0-5)**

To learn techniques and procedures of some of the different forms of puppetry, and some of the applications possible.

**ART 300 VISUAL STUDIES IN AESTHETIC
EXPERIENCES
3 (3-0-0) Fall and Spring**

Philosophic theories of art aesthetic experience, principles and criticism in the nature and comprehension of the character of art, the artist and relationship to life. To be taken during the junior or senior year only.

**ART 302 ADVANCED PAINTING
1-6 Fall and Spring**

A course for the student who wishes to advance and mature those skills and powers of expression developed in the first level studio course, with emphasis on the development of personal techniques and styles and/or exploration into traditional and experimental media. The student may elect the number of semester hours for which he wishes to work, with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours. *Prerequisite:* ART 201.

**ART 311 ADVANCED DRAWING
1-6 Fall and Spring**

A course for the student who wishes to work with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours. *Prerequisite:* ART 231.

ART 332 ADVANCED GRAPHICS

1-6 Fall and Spring

Advanced problems in the various print-making processes, linocut, woodcut, lithography, serigraphy, etching, intaglio and drypoint. The student may select the number of semester hours for which he wishes to work with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours. *Prerequisite:* ART 231.

ART 342 ADVERTISING, DESIGN AND LETTERING

3 (1-0-5)

An elective course that provides the student with a basic introduction to many of the aspects of designing for the commercial world. Introductions to the psychological, social, technical, economic and cultural aspects are presented through films, seminars, field trips, discussions, and the actual experience of creating advertisements.

ARTE 343 ARTS AND CRAFTS IN THE SPECIAL EDUCATION CURRICULUM

3 (1-0-3) Fall and Spring

Creative work in a variety of activities with arts and crafts materials with particular emphasis on the needs of special education classes. Required of students concentrating in the area of special education.

ARTE 344 ARTS AND CRAFTS IN THE SPECIAL EDUCATION CURRICULUM II

3 (1-0-3) Fall and Spring

Continuation of Art 343.

ART 345 FIBERS

3 (1-0-4) Fall and Spring

The creative application of the principles and elements of design and color theory as applied to fibers and fabrics. This includes creative designing of wall hangings, creative weaving, Batik dying and stitchery.

ART 346 FIBERS WORKSHOP

3 (0-0-6)

Course is designed to familiarize the participants with constructed textile techniques such as weaving, macrame, knitting, crochet, and rug making are explored through both functional and expressive aspects of textiles.

ART 352 ADVANCED JEWELRY

1-6 Fall and Spring

An advanced study of traditional metal techniques with emphasis on metal smithing, and gem setting. A continued study of lost wax processes, exploring various mold materials and methods of casting. The student may elect the number of semester hours for which he wishes to work, with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours.

ART 362 ADVANCED WATERBASE MEDIA

1-6 Fall and Spring

An opportunity for a student to pursue wider directions in water color and acrylic painting. The course is flexible enough in structure to provide students with opportunities to seek in depth solutions to personal goals. Students may opt for any number of credits not exceeding the total of six. The course may be taken several times. *Prerequisite:* Art 261.

ART 372 ADVANCED CERAMICS

1-6 Fall and Spring

Advanced studies and individual projects in techniques studied in Art 271, with emphasis on developing a personal style. Intensive work in throwing on the wheel, hand building, development of stoneware bodies. Glaze calculation and practical modification. Kiln stacking and firing. This course may be repeated any number of times, but not exceeding the total of six credits. *Prerequisite:* Art 271.

ART 382 ADVANCED SCULPTURE

1-6 Fall and Spring

A continuation of Sculpture I with emphasis on personal growth and development in specific sculptural media, or experimental media. The student may elect the number of semester hours for which he wishes to work, with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours. *Prerequisite:* Art 281.

EL. ED. 392 TEACHING ART IN THE ELEMENTARY GRADES

3 (2-0-2) Fall and Spring

The philosophy and principles of art education in the Elementary curriculum; experience in the development of self-expression through a variety of media and activities as the basis for understanding and evaluating children's work. Required of all Elementary majors.

ART 395 STAGE ARTS

2 (1-0-3)

A practical introduction to stage design that can be applied to productions on all levels of the public school systems. Elements of design are analyzed in terms of their application to concepts of action, objectives, and quality. Designs are developed in two and three dimensions to resolve the visual image of a given play. Conventional drawings for the theatre (including floor plans, elevation plans, light plot, layout and costume drawings) complete the scenic study.

ART 396 ADVANCED CRAFTS

1-6

Advanced Crafts will investigate various craft techniques and processes in metal enameling, lapidary, book-binding, creative uses of paper, fibers and metals. Each student will have opportunities for in depth experimentation to develop competencies in various media of the student's choice. This course may be repeated any number of times but not exceeding a total of six (6) credits. *Prerequisite:* ART 295.

ART 398 INTERIOR DESIGN

2 (1-0-3)

Interior design in planning, selection and production as applied to the home and its furnishings. This course will deal with the "furnishing" of space for living. This furnishing should meet the human needs for which it was designed.

ARTH 401 CULTURAL ORIGINS OF THE WEST

6 Credits — Summer

A travel-study seminar abroad visiting countries in Western Europe. The course is planned as one of intensive study of the humanities as they originated in that part of the Western World from which our culture springs. Lectures are conducted throughout the tour by the director, a term paper is prepared by the participants. A General Education elective applicable to all curricula.

ART 404 SPECIAL PROBLEMS IN ART

1-6

This course is offered to those persons interested in extending their scope or gaining depth in specific academic areas related to art and/or education. This course provides an opening or situation whereby a student can fulfill his needs by working with a faculty member who has agreed to advise and direct the student in his efforts. Since this is a mutual agreement between the faculty member and the student, and since the needs and conditions change with each student, the requirements and restrictions are determined by the persons concerned.

**ARTE 444 ART AND RECREATION FOR THE
HANDICAPPED CHILD**
6 S.H. Summer

A three week workshop practicum which combines classroom instruction with direct application, working with handicapped children in camping situation, sponsored by Easter Seal Society of Pennsylvania. Students will work in classroom on campus for one week, then spend two weeks, 24 hours a day, in camp living, working, and playing directly with handicapped children.

ART 445 ADVANCED FIBERS
1-6

The course is designed to allow students to develop skills learned in beginning textile courses, either by specializing or learning new techniques. Techniques covered may include weaving (tapestry, pattern, primitive loom), hooking, knotting, crochet, knitting, stitchery, macrame, batik, tie dye, block printing, silk screen, dye painting, ikat, combination techniques. This course may be repeated any number of times but not exceeding the total of six (6) credits. *Prerequisite:* ART 345.

ART 497 INDEPENDENT STUDY
1-3

(See page 20 for course description.)

ART 498 ADVANCED PUPPETRY
1-6

Course for the continued development of skills, procedures and techniques begun in Puppetry I. The student is encouraged to specialize for an in-depth study of construction and/or application. This course may be repeated any number of times but not exceeding the total of six (6) credits. *Prerequisite:* Puppetry I, or similar background, or permission of instructor.

ASTRONOMY

**ASTRO 105 THE EXPLORATION OF THE SOLAR
SYSTEM**
3 (2-0-2)

A descriptive astronomy course concerning contemporary astronomical and astrophysical theories about the solar system.

ASTRO 106 ONE POSSIBLE UNIVERSE
3 (2-0-2)

A descriptive astronomy course concerning contemporary astronomical and astrophysical theories about the universe.

ASTRO 112 AEROSPACE
3 (2-0-2)

Relevance of space exploration to society will be integrated into course content. The laboratory will acquaint the student with propulsion systems; problems of guidance, navigation, radiation, and aerodynamics; and the physiological and psychological reactions to space travel.

ASTRO 405 PLANETARIUM OPERATIONS
1

Although each student will be required to learn how to operate Planetarium instruments, the primary aim of this course is to acquaint the participants with both the extent and limitations of the facility as an educational tool for school children as well as for the general public. *Prerequisites:* Undergraduates — 6 credits of astronomy or 3 credits and permission of instructor; Graduates — permission of instructor.

ASTRO 497 INDEPENDENT STUDY
1-3

(See page 20 for course description.)

BIOLOGY

BIO. 101 MAN AND THE BIOLOGICAL WORLD
4 (3-0-2)

An introduction to biological processes; study and discussion of these processes together with ecological aspects of life. The laboratory stresses demonstration and analysis of biological processes.

BIO. 102 CONTEMPORARY BIOLOGICAL PROBLEMS
3 (3-0-0)

There is no fixed syllabus. Topics are current and usually changed for each semester. Guest lecturers will be given time to present their specialties. *Prerequisite:* BIO. 101.

BIO. 111 INTRODUCTION TO CELL BIOLOGY
4 (3-0-3)

A study of the cellular level of life with emphasis on cellular structures and their relationship to movement, function and energy transformation. Cellular genetics and the cellular approach to medicine are also discussed. Designed for biology majors.

BIO. 210 ZOOLOGY
4 (3-0-3)

An evolutionary approach to the study of the animal kingdom, with attention given to the development of organ systems throughout the several phyla of invertebrates and vertebrates. Function, correlated with structure and taxonomic features, is emphasized. Additional evidence for evolution is included through an introduction to Genetics, Embryology and Ecology. *Prerequisites:* BIO. 101 or 111.

BIO. 220 BOTANY
4 (3-0-2)

Study of plant structures and function, development, growth, diversity and evolution. *Prerequisites:* BIO. 101 or 111.

BIO. 230 FIELD ZOOLOGY
3 (2-0-3)

Taxonomy of local fauna; field collections and laboratory studies. *Prerequisites:* BIO. 101 or 111 or 210.

BIO. 240 LOCAL FLORA
3 (1-0-4)

Taxonomic study of local flowering and non-flowering plants. *Prerequisites:* BIO. 111 or 220.

BIO. 250 MARINE BIOLOGY
3 (2-0-2) Spring

This course includes studies basic to the biology and ecology of marine organisms. Practical applications such as biological-ecological sampling techniques and species identification are covered in the laboratory and on a coastal field trip. *Prerequisites:* BIO. 111, or permission of the instructor. BIO. 310 recommended.

**BIO. 260 FIELD METHODS IN ENVIRONMENTAL
BIOLOGY**
3 Summers

A study of the field methods employed in measuring the biological qualities of the environment. Techniques applicable to surveys of the major aquatic and terrestrial habitats are taught through field experience. Analysis of data obtained and consideration of its significance is an integral part of the course. Weekly schedule: 2 hours recitation and 12 hours lab. *Prerequisites:* BIO. 101 or equivalent; BIO. 310 recommended.

PSN/BIO. 309 EPIDEMIOLOGY
3 (2-1-0)

The study of distribution and determinants of disease and injury in populations. This provides an introduction into community health and medical problems and services. Problem solving, Case-control studies, and statistical analysis is emphasized. *Prerequisite:* PSN Program or permission of instructor.

BIO. 310 ECOLOGY
3 (2-0-2)

A study of the fundamental ecological principles manifested in the mutual relationships of plants and animals in their environment. *Prerequisite: BIO. 111 or permission of instructor.*

BIO. 312 POPULATION BIOLOGY AND EVOLUTION
3 (2-0-2)

A study of the principles of population biology and the evolutionary process. The interactions of genetics and ecology which produce natural selection are emphasized in the lectures. The laboratory emphasizes experimental support for the theories presented. *Prerequisites: BIO. 111 or equivalent; BIO. 310 and 340 are recommended.*

BIO. 320 ORNITHOLOGY
3 (2-0-3)

The biology of birds with emphasis on structure, behavior and taxonomy. Field trips for the study of local birds. *Prerequisite: BIO. 210 or permission of instructor.*

BIO. 325 ENTOMOLOGY
3 (2-0-2)

Survey of the classification, structure, physiology, biology and economic importance of insects. An introduction to the study of insects as a major segment of the biological community. Laboratory exercises on the anatomy and practice in the techniques of insect identification. *Prerequisite: BIO. 210, or permission of instructor.*

BIO. 330 PLANT PHYSIOLOGY
3 (2-0-2)

A course designed to develop an understanding of the chemical and physical processes occurring in plants including respiration, photosynthesis, hormonal activity, osmosis, transpiration, mineral absorption and translocation. The laboratory work will involve analysis of these functions. *Prerequisites: BIO. 111, and 220, or permission of instructor.*

BIO. 331 VERTEBRATE ANATOMY
3 (2-0-4)

A history of vertebrates and a study of comparative systems through the major vertebrate groups correlating their historical development. *Prerequisite: BIO. 111 or 101.*

BIO. 332 PHYSIOLOGY
4 (3-0-2)

A systematic study of the life processes and functions of the animal body with particular emphasis on the mammalian vertebrate. *Prerequisite: BIO. 111 or BIO. 101.*

BIO. 333 QUANTITATIVE BIOLOGY
3 (3-0-0)

An application of mathematics to the science of Biology using exercise problems based on the student's fundamental mathematic knowledge to demonstrate the methods of creating and analyzing biological experiments.

BIO. 340 GENETICS
3 (2-0-3)

An introductory course with emphasis on the basic principles and concepts of genetics concerning chromosomes, DNA, RNA, linkage, etc. An initial discussion will cover classical genetics followed by an in-depth study of biochemical genetics. The laboratory section of this course will be used to demonstrate the aforementioned principles and concepts as well as acquaint the student with some of the organisms used in genetic research. *Prerequisite: BIO. 111 or permission of instructor.*

BIO. 345 EMBRYOLOGY
3 (2-0-3)

Study of the origins and development of animals with special emphasis on the frog, chick and mammal. Laboratory study of embryological slides. *Prerequisite: BIO. 111 or permission of instructor.*

BIO. 351 ANIMAL HISTOLOGY AND BASIC MICROTECHNIQUES
3 (2-0-2)

A systematic study of the microanatomy of the vertebrate body starting with cells and tissues and working through the complete organ systems. *Prerequisite: BIO. 111 or 101.*

BIO. 355 MICROBIOLOGY
3 (2-0-3)

An introductory course with an emphasis on the basic principles and concepts of microbiology concerning anatomy, classification, physiology and practical uses of micro-organisms. The laboratory section of this course will be used to demonstrate the aforementioned principles and concepts as well as help the student develop aseptic technique. *Prerequisite: BIO. 111 or permission of instructor.*

BIO. 360 ICHTHYOLOGY
3 (2-0-3)

A field and laboratory study of the fish inhabiting the streams and rivers of this area constitutes the major portion of this course. Collection, measurement and chemical data as related to fish populations, management and meristic characters will be collected and analyzed. *Prerequisites: BIO. 210, 310, 331, or permission of instructor.*

BIO. 362 LIMNOLOGY
3 (2-0-3)

This course deals with basic concepts in the study of inland waters. Focus on biological, chemical, physical and geological factors which determine biological productivity in natural waters. *Prerequisite: BIO. 111 or permission of instructor.*

BIO. 375 PLANT MORPHOLOGY
3 (2-0-2)

Comparative study of vegetation and reproductive structures of the principal plant groups with an aim of understanding their possible relationships. *Prerequisites: BIO. 111 or 220 or permission of instructor.*

BIO. 385 HERPETOLOGY
3 (2-0-3)

The biology of amphibians and reptiles with special emphasis on evolution and adaptation. Laboratory studies will stress structure, adaptation, and speciation. Field studies will illustrate life history and ecology. *Prerequisites: BIO. 111, 101-102, BIO. 210 recommended.*

BIO. 404 BIOLOGY SEMINAR
1 (0-1-0)

Study and research projects involving investigation of recent literature in the field of biology; preparation of seminar papers on assigned problems. Senior biology majors only.

BIO. 444 MOLECULAR BIOLOGY
3 (2-0-2)

An examination of the principles and techniques underlying the chemical and physical aspects of living systems. A study of the structure and activities of biological molecules which, properly integrated, constitute all forms of life. The laboratories will demonstrate techniques of the activities, separation and analysis of these molecular forms. *Prerequisite: BIO. 111.*

BIO. 450 BIOLOGY INTERNSHIPS
1-12 Variable

The biology Internship gives students the opportunity to apply knowledge and skills in the biological sciences while working with a public or private agency involved in aspects of applied biology. The practical experience thus acquired both supplements and reinforces the more academic aspects of biology stressed in the classroom.

BIO. 497 INDEPENDENT STUDY
(See page 20 for course description.)

BFC 213 FISH CULTURE I**3 (3-0-0) Fall**

An introduction to the modern scientific culture of coldwater fish, specifically the salmonids. Basic procedures are covered with an emphasis on their practical and economical application to government and commercial hatcheries.

BFC 214 FISH CULTURE II**3 (3-0-0) Spring**

A continuation of Biology Fish Culture 213. It emphasizes the culture of coolwater and warmwater fishes including gametifishes, bait-fishes and exotic species such as carp and tilapia.

BFC 215 FISH PATHOLOGY**2 (1-0-2) Fall**

A consideration of the diagnosis and treatment of diseases commonly found in hatchery fish. Diseases of bacterial, viral and parasitic and environmental origin are studied together with recommended treatment for each.

BFC 216 FISH NUTRITION**2 (2-0-0) Spring**

A study of the nutritional requirements of fish including a consideration of the relative efficiency with which various foods and feeding methods contribute to growth and food production of fish in hatcheries.

BFC 217 FISH MANAGEMENT**2 (2-0-0) Spring**

A consideration of the interrelationships of fishes and habitats, emphasizing the ultimate use of hatchery reared stock in commercial and governmental activities.

**BFC 218 LITERATURE REVIEW AND
REPORTS IN FISH CULTURE****1 (1-0-0) Spring**

A study of scientific literature of fish culture, with special emphasis on its organization and retrieval and the writing of reports.

BUSINESS ADMINISTRATION**BUS 120 INTRODUCTION TO BUSINESS****3 (3-0-0)**

An overview of the business world including an introduction to such major business specialties as marketing, management, finance and accounting. Businessmen from the region will be invited as guest lecturers.

BUS 330 MARKETING**3 (3-0-0)**

The course fills an integral part in the development of the skills necessary for the preparation of the student whose career interest is a business environment. The student of business should be aware of marketing, one of the four major functions of business (in addition to organization, administration, and finance).

BUS 340 FINANCE**3 (3-0-0)**

Corporate finance stressing the management approach as it applies to asset management and capital structure. Emphasis is placed on financial policies regarding the acquisition of funds and their allocation to competing assets within the firm. *Prerequisites: ECON 101 and CIS 110.*

BUS 350 PRODUCTION MANAGEMENT**3 (3-0-0)**

Study of production functions including production planning, scheduling, inventory control, quality control, work measurement, methods analysis, and facilities planning. *Prerequisite: CIS 215.*

BUS 410 BUSINESS LAW AND ETHICS**3 (3-0-0)**

The law, contracts, sales, negotiable instruments, bank deposits and collections, secured transactions, and business organizations. Social and ethical considerations will be emphasized, including a critical examination of the values which appear to underlie our managerial society, and the processes by which such values are formed and modified.

BUS 490 BUSINESS POLICY**3 (3-0-0)**

A study of business problems and the formulation of policies to meet these problems from the viewpoint of general management, integrating knowledge acquired in other courses in order to develop skill in policy formulation for particular functions and for companies as a whole. Long range goals' attainment and the required administrative action will be emphasized. The course is supplemented by case studies, simulation games, and interactions with management of local business and industry. *Prerequisite: Senior majors.*

BUS 497 INDEPENDENT STUDY

(See page 20 for course description.)

CHEMISTRY

CHEM. 101 INTRODUCTORY CHEMISTRY

4 (3-1-2)

A treatment of fundamental principles for non-science majors such as Home Economics students. Not open to science majors. Staff: Sidler, Powell, Schmid, Hartman, George.

CHEM. 102 ORGANIC AND BIOCHEMISTRY

4 (3-1-2)

Principles of organic and biochemistry which are important and useful to non-science majors. Not open to science majors. *Prerequisite:* CHEM. 101. Staff: Sidler, Powell, Hartman.

CHEM. 103 ENVIRONMENTAL CHEMISTRY

3 (3-0-0)

A non-laboratory course for non-science majors which deals with the chemical aspects of pollution, resource depletion, energy sources, drugs, chemical additives, etc. Staff: Sidler, Schmid, Powell.

CHEM. 106 CHEMISTRY FOR THE ALLIED HEALTH SCIENCES

3 (3-0-0) Spring

A one semester survey course for non-science majors. General, Organic, Biochemistry and Clinical chemistry are emphasized for students in health support programs.

CHEM. 111 GENERAL CHEMISTRY I

4 (3-0-3)

Designed for science majors, this course is a study of the fundamental principles of chemistry from the standpoint of stoichiometry, gases, states of matter, solutions and equilibrium theory. Laboratory sessions stress chemical principles discussed in the lecture. Staff: George.

CHEM. 112 GENERAL CHEMISTRY II

4 (3-0-3)

A continuation of Chem. 111, kinetics, thermodynamics, oxidation-reduction, atomic and molecular structure, bonding and periodic relationships are studied. The laboratory work is an introduction to inorganic qualitative analysis and includes experiments designed to exemplify chemical principles. *Prerequisite:* CHEM. 111. Staff: George.

CHEM. 201 INTRODUCTION TO BIOCHEMISTRY

4 (3-0-2)

A one semester course in elementary biochemistry for non-science majors having a minimum of preparation in organic chemistry. A laboratory is included. *Prerequisite:* CHEM. 102.

CHEM. 211 ORGANIC CHEMISTRY I

4 (3-0-4)

Fundamentals of organic chemistry are presented. Modern theory, reaction mechanisms and stereochemistry are included along with nomenclature, preparations, reactions and properties of organic compounds. The laboratory stresses synthesis, chemical and physical properties and an introduction to instrumental technique. *Prerequisite:* CHEM. 112. Staff: Sidler and Hartman.

CHEM. 212 ORGANIC CHEMISTRY II

4 (3-0-4)

A continuation of Chem. 211. *Prerequisite:* CHEM. 211. Staff: Sidler and Hartman.

CHEM. 311 QUANTITATIVE ANALYSIS

4 (3-0-4)

An introductory course in analytical chemistry emphasizing classical titrimetric and gravimetric methods and related theories. *Prerequisite:* CHEM. 112. Staff: Powell, Schmid.

CHEM. 321 PHYSICAL CHEMISTRY I

4 (3-0-4)

A study of the fundamental principles of thermodynamics of gasses and non-electrolytes. Topics include kinetic theory, gasses, thermodynamic laws, chemical equilibrium, liquids, phase equilibria and non-electrolyte solutions. *Prerequisites:* CHEM. 212 and 311, Math. 211, Physics 188 and 211. Staff: Schmid and Powell.

CHEM. 322 PHYSICAL CHEMISTRY II

4 (3-0-4)

A continuation of Chem. 321. Topics include: thermodynamics of electrolytes, atomic and molecular structure and chemical kinetics. *Prerequisite:* CHEM. 321.

CHEM. 332 INSTRUMENTAL ANALYSIS

3 (2-0-3)

Principles and applications of instrumental methods in chemical and structural analysis. Studies include electroanalytical, spectrophotometric and chromatographic techniques. *Prerequisites:* CHEM. 311, 321. Staff: George and Powell.

CHEM. 341 BIOCHEMISTRY

4 (3-0-3)

A study of carbohydrates, lipids, proteins, enzymes, nucleic acids, vitamins and hormones in terms of structure, function and synthesis in living systems. The laboratory includes the isolation, identification and chemical behavior of biochemically important molecules. *Prerequisites:* CHEM. 212 or consent of instructor. Staff: Sidler and Hartman.

CHEM. 342 PHYSICAL CHEMISTRY FOR THE LIFE SCIENCES

4 (3-0-2)

A one semester course in physical chemistry emphasizing subjects bearing on the life sciences. Topics include buffers, bioenergetics, kinetics of enzyme reactions, colloidal and large particle systems, membrane phenomena, nuclear chemistry and elementary treatments of traditional subjects in physical chemistry. *Prerequisites:* CHEM. 212, Physics 211. Staff: Powell.

CHEM. 352 RADIOCHEMISTRY

3 (2-0-3)

Study of radioisotope methodology. A laboratory oriented course familiarizing the student with radiation detection and applications in natural science problems. The course is of practical value to the B.S. and B.A. science major. *Prerequisite:* Junior or Senior science majors or permission of the instructor. Staff: Schmid.

CHEM. 410 CHEMISTRY SEMINAR

1 (1-0-0)

Reports emphasizing chemical literature searches and/or current research. *Prerequisite:* Upper division chemistry majors. Staff: All department faculty.

CHEM. 420 QUALITATIVE ORGANIC CHEMISTRY

3 (2-0-4)

The identification of organic compounds by various classical and instrumental techniques. *Prerequisite:* CHEM. 212. Staff: Hartman and Sidler.

CHEM. 421 ADVANCED ORGANIC CHEMISTRY

3 (3-0-0)

An advanced lecture course designed to deepen and expand knowledge in the field. Topics such as reactions, mechanisms, reactive intermediates, photochemistry, kinetics, stereochemistry, natural products and spectroscopy may be stressed. *Prerequisite:* CHEM. 212. Staff: Sidler.

CHEM. 431 ADVANCED INORGANIC CHEMISTRY

4 (3-0-4)

A presentation of atomic structure and periodic properties. In addition to other topics, valence bond, molecular orbital, crystal field and ligand field theories are treated in detail. Laboratory preparations of representative compounds are included. *Prerequisite:* CHEM. 322. Staff: George.

CHEM. 432 STRUCTURAL CHEMISTRY

3 (3-0-0)

Modern methods of structure determination of inorganic and organic compounds. X-ray diffraction, ultra-violet and infrared absorption spectra, mass spectrometry, and nuclear magnetic resonance spectroscopy is discussed in detail. *Prerequisite:* CHEM. 332. Staff: Powell.

CHEM. 490 PROBLEMS IN CHEMISTRY

1-3

Study projects under the direct supervision of an instructor. Library and laboratory research in selected problems. *Prerequisite:* Consent of instructor. Staff: All department faculty.

CHEM. 497 INDEPENDENT STUDY

(See page 20 for course description.)

COMPUTER AND INFORMATION SCIENCE

CIS 100 MANAGEMENT AND ORGANIZATION

3 (3-0-0) Fall

Designed to acquaint the student with the functions and internal structure of modern business organizations as well as various techniques and systems employed by management in pursuit of desired organizational objectives.

CIS 101 COMPUTERS IN SOCIETY

3 (3-0-0) Fall and Spring

An introduction to computing, designed to acquaint the student with the broad impact of computers on modern society, and to provide a basic understanding of how to program and use them. Particular attention will be paid to the extension of concepts and capabilities made possible by the advent of computers. Through the use of the computer in a variety of applications drawn from the social sciences and humanities, as well as from the natural sciences, it is stressed that the computer is not primarily a numerical calculator but a general symbol processor.

CIS 105 PROGRAMMING AND INFORMATION PROCESSING

3 (3-0-0) Spring

Topics to be covered will be definition of the problem, problem analysis, programming analysis — to include flowcharting and decision tables, program preparation, optimization — using the Common Business Oriented Language (COBOL), program operation and maintenance, and documentation. Examples of problems and programming solutions will be used throughout the course. The Student will be expected to write and execute his own programs on the computer.

CIS 110 INTRODUCTION TO ACCOUNTING

3 (3-0-0) Fall and Spring

An introductory course in accounting that will develop a basic understanding of debits and credits, accounts receivable, accounts payable, current assets, liabilities, and capital accounts, balance sheets and profit and loss statements. Also included will be an introduction to the preparation of federal income tax returns for single proprietorship businesses.

CIS 215 MANAGERIAL ACCOUNTING

3 (3-0-0) Fall or Spring

Management uses of information, reporting and analysis, control, cost accounting, variances, planning and budgeting. *Prerequisite:* CIS 110.

CIS 225 AUTOMATED ACCOUNTING SYSTEMS

3 (3-0-0) Spring

A general introduction to the development and implementation of an electronic data processing accounting information system. Approach, elements of design, input media, computer-based accounting, audit trails, relevancy and timeliness of information. *Prerequisites:* CIS 105 and CIS 110.

CIS 230 LANGUAGE AND STRUCTURE OF COMPUTERS

3 (3-0-0) Spring

Fundamentals of assembly language programming. The logical basis of computer structure, machine representation of information, flow of control, instruction codes, arithmetic and logical operations, indexing and indirect addressing, input-output, symbolic representation of programs and assembly systems, and recent advances in computer organization. *Prerequisite:* Math 107 or CIS 105.

CIS 301 DATA STRUCTURE AND MANAGEMENT

3 (3-0-0) Spring

Representation, classification and management of information. Involves data organization; relationships between data items, fields, records, files and volumes; ordering of data into arrays, trees and graphs; input and output devices; sequential and random access concepts of data management; and algorithmic and string manipulation languages applied to these data structures. *Prerequisites:* Math 107 and CIS 105.

CIS 310 INTRODUCTION TO SYSTEMS ANALYSIS

3 (3-0-0) Fall

An introduction to the concepts of systems analysis and design. Problem definition, data gathering, information analysis, presentation techniques, implementation planning, system controls, documentation. Selected case studies. *Prerequisites:* CIS 100 and CIS 105.

CIS 325 OPERATING AND PROGRAMMING SYSTEMS

3 (3-0-0) Fall

Functions of computer components (CPU, reader, punch, tapes, printer, memory), systems, hardware, operation, maintenance, accounting routines. Insight into the function of translators, compilers, monitors, assemblers, processors, generators, data scheduling systems, simulators, sort-merge, control and supervisory systems, libraries and systems support. *Prerequisite:* CIS 230.

CIS 420 SPECIAL PROBLEMS IN COMPUTER APPLICATIONS

An individualized honors course designed to allow a student to pursue a specialized topic or project under supervision. Credit is granted according to the scope and nature of the project. Student may be nominated or sponsored by the professor interested in the work. Course may be repeated for different projects.

CIS 480 OPERATIONS RESEARCH

3 (3-0-0) Fall

The development and use of the techniques of operations research. Topics include linear programming, queuing theory, probabilistic inventory models and stimulation. *Prerequisites:* MA 105, MA 111, and MA 107 or CIS 105.

CIS 497 INDEPENDENT STUDY

(See page 20 for course description.)

CRIMINAL JUSTICE ADMINISTRATION

CJA 100 INTRODUCTION TO THE ADMINISTRATION OF CRIMINAL JUSTICE

3 (3-0-0) Fall and Spring

An introduction to the field of criminal justice; the historical development of the police, courts and correctional institutions of government; the conceptual and philosophical issues relating to contemporary law enforcement, courts and corrections, the literature, studies, research and authorities in criminal justice; careers in criminal justice.

CJA 101 INTRODUCTION TO CORRECTIONS ADMINISTRATION

3 (3-0-0)

Origin and history of incarceration practices and procedures; associated sociological, criminological and penological concepts; categories of inmates and laws affecting classification; special custody problems and treating programs; staff organization — professional administrative and custodial personnel training recruitment and promotions; inter-agency relationships and cooperation, release programs, furloughs, work-release and final discharge.

CJA 102 INTRODUCTION TO LAW ENFORCEMENT

3 (3-0-0) Fall and Spring

An introduction to Law Enforcement problems and practices; its legal, political and historical frame work. An analysis of police organizations, and their relationship with other criminal justice and social agencies.

CJA 240 ORGANIZED CRIME IN AMERICA

3 (3-0-0)

An investigation into the history and impact of organized crime upon American social, economical and political institutions. Organized crime prevention, including investigation and prosecution; the education of criminal justice professionals and the general public in coping with organized crime is also stressed.

CJA 251 POLICE-COMMUNITY RELATIONS

3 (3-0-0) Fall and Spring

Basic definitions; rule of law; psychological and sociological aspects of police-community relations; police and minority groups; social change and law enforcement; principles of programming in police-community relations; police discretion; police role, police problems.

CJA 252 INVESTIGATION AND INTERROGATION

3 (3-0-0)

This course focuses upon an introduction to the fundamentals of criminal investigation, rules of evidence, sources of information, observations, descriptions and identifications, including collection, preservation and processing of physical evidence, records, reports, statements, case preparation, surveillance and undercover techniques, modus operandi and raids. Emphasis will be given to those areas of crime investigation which appear to be of increasing importance to understanding the situation as it is.

CJA 256 PROBATION, PAROLE AND COMMUNITY CORRECTIONS

3 (3-0-0)

Examination of community treatment in the correctional process; contemporary usage of pre-sentence investigation, selection, supervision, release of probationers and parolees.

CJA 257 CORRECTIONAL INSTITUTIONS AND SERVICES

3 (3-0-0)

Intensive analysis of intramural and extramural programs for juvenile and adult offenders; professional functions in the total correctional process.

CJA 260 HISTORY OF CRIMINAL JUSTICE IN THE UNITED STATES

3 (3-0-0)

The history of law enforcement, the judicial system, and courts in America with attention to the English background and emphasis on Twentieth Century America.

CJA 276 CRIME: A MULTIDISCIPLINARY APPROACH

3 (3-0-0)

This course is designed to expose the students to the nature and forms of crime. Major areas of concern are the return of law, the scientific study of crime, criminological typologist, social definitions of crime, and the problem of punishment.

CJA 295 DELINQUENCY AND THE CRIMINAL JUSTICE SYSTEM

3 (3-0-0)

This course is designed to expose the student to the full impact of the delinquency problem. Theories of delinquency causation, prevention, and rehabilitation will be critically examined.

CJA 324 ADMINISTRATION OF JUSTICE

3 (1-2-0)

An examination of the role and function of the judiciary in the policy-making process. Emphasis is placed on the variables affecting the process of judicial decision-making as well as a study of modes of compliance by the populace to judicial decisions.

CJA 326 COURT MANAGEMENT

3 (2-1-0)

This course deals with the major problem areas of court administration: judges as administrators, budgeting, calendars, caseload Management, management information systems in court Management; jury selection, juror utilization records management, legal forms, forms design, personnel practises and administration. The course is oriented around problems. The students will be expected to work together as a team in the solution of real problems that face rural and metropolitan courts at the present time. Field trips, investigation and guest lectures will supplement the materials presented in class.

CJA 340 MANAGEMENT OF VOLUNTEERS IN CJA

3 (3-0-0)

The course develops an understanding of the importance of the volunteer movement in Criminal Justice Administration. It shows how volunteers have been and can be used in Criminal Justice agencies. It analyzes the motives of volunteers and assists the professional in the screening and training of volunteers. It also discusses the recruitment and rewarding of volunteers.

CJA 354 CRIMINAL LAW

3 (3-0-0)

Principles, theories and doctrines of the law of crimes with a unified study of legal defenses; elements and proof in crimes of frequent concern; importance of criminal law at the enforcement level is considered from crime prevention to the courtroom; case analysis.

CJA 355 EVIDENCE AND CRIMINAL PROCEDURE

3 (3-0-0)

Rules of evidence of particular import at the operational level in law enforcement; types of evidence; principles of admissibility; the attendance and production of witnesses, their competency and impeachment; arrest, search and seizure; use of force; Supreme Court decisions affecting this area of criminal justice administration.

CJA 356 LAW OF CORRECTIONS

3 (3-0-0)

Analysis of the legal dimension of sentencing; the correctional treatment of persons under sentence, and conditional release and revocation with emphasis on administrative decision-making in the correctional process.

CJA 357 CORRECTIONAL STRATEGIES

3 (3-0-0)

Offender classification; special offender groups, treatment, custody, recidivism, strategies designed to change offender conduct.

CJA 359 JUVENILE JUSTICE

3 (3-0-0)

Structure and format of the juvenile justice system — police, courts and corrections; analysis and description of the organizational structure of each of the subsystems of the juvenile justice process; introduction to juvenile justice literature and research findings.

CJA 450 PRACTICUM IN CRIMINAL JUSTICE ADMINISTRATION

1-15

Educational and work experience in an actual criminal justice agency — law enforcement, courts, and corrections; work-study plan; applicable agency research project; periodic conference with criminal justice agency personnel and faculty advisor.

CJA 453 POLICE ORGANIZATION AND ADMINISTRATION

3 (3-0-0)

Organizational theory, budgeting, personnel management planning, information management theory, civil service, unions, management prerogatives, supervision, executive development, manpower distribution schemes, and policy development and execution as applied in both small and large law enforcement agencies. *Prerequisites: CJA 250, CJA 452, and PSCI 240.*

CJA 497 INDEPENDENT STUDY

(See page 20 for course description.)

ECONOMICS

ECON 101 AMERICAN ECONOMY: MACRO **3 (3-0-0) Fall and Spring**

An introduction to aggregate economics with emphasis on interdependence of sectors of an economy, aggregate concepts, determination of national income and fiscal and monetary policy for stabilization.

ECON 102 AMERICAN ECONOMY: MICRO **3 (3-0-0) Fall and Spring**

The mechanism of the free enterprise system: pricing, production, and employment under various market conditions; functional distribution of income; selected topics in modern theory of general equilibrium and welfare economics.

ECON 204 HISTORY OF ECONOMIC THOUGHT **3 (3-0-0) Fall or Spring**

A study of economic ideas from the eighteenth century to the present. A brief review of physiocracy and mercantilism followed by a closer survey of classical liberalism, pre-Marxist and utopian socialism. Marxism, neoclassicism, institutionalism and other contemporary developments.

ECON 205 CONTEMPORARY ECONOMIC PROBLEMS **3 (3-0-0) Fall or Spring**

Examination of some of our crucial economics problems; unemployment, inflation, poverty; also of some of the minor issues; right-to-work, national debt, and of several international concerns, i.e., the Common Market.

ECON 311 MONEY AND BANKING **3 (3-0-0) Fall or Spring**

An inquiry into the monetary system of the U.S. Brief examination of historical development; the functioning of monetary policy is considered. Emphasis on the public/private nature of our banking system.

ECON 401 LABOR RELATIONS **3 (3-0-0) Fall or Spring**

Equal consideration is given to the market and institutional factors of labor management relations. The role of government especially as defined in major legislation is examined. Historical development of trade unions serves as an introduction.

ECON 497 INDEPENDENT STUDY (See page 20 for course description.)

ELEMENTARY EDUCATION

EDEL 185 READING-STUDY SKILLS FOR THE NOW STUDENT **2 (0-0-4)**

A diagnostic/correctional course to diagnose and correct reading-study problems of college students. Each student will follow an individualized-prescriptive program to correct reading-study skills deficiencies identified by individual diagnosis. *Prerequisites: None*

EDEL 201 PRE-PROFESSIONAL EXPERIENCES **1 (1-0-0) Fall**

The course provides students of sophomore standing with the following observation and seminar experiences with elementary education: orientation to the Elementary Education Department and the Division of Professional Studies, examination of current goals of elementary education and the current expectations of modern elementary school teachers, observation of actual teaching-learning activities in the public school, study of principles affecting teaching-learning situations, study of observation criteria and procedures and informal advisement seminars.

EDEL 202 PRE-PROFESSION EXPERIENCES **2 (1-0-1)**

The course provides students of sophomore standing with clinical experiences in elementary education which include: identification and analysis of current educational practices, brief episodes of exploratory teaching in an elementary school classroom, investigations of career possibilities and their requirements, an orientation to the Elementary Education Department and the Division of Professional Studies, and informal advisement seminars.

EDEL 300 PRE-SCHOOL EDUCATION **3 (3-0-0) Fall and Spring**

Objectives, equipment and procedures in nursery school and kindergarten; observation in kindergarten classes. Consent of the instructor required.

EDEL 301 OBSERVATION AND PARTICIPATION IN ELEMENTARY EDUCATION **2 (0-1-2) Fall and Spring**

The course provides students of junior standing with the following observation, participation and professional guidance experiences: the opportunity to observe an elementary school classroom in action, orientation to the policies and practices of an elementary school, the opportunity to observe a competent in-service teacher in the performance of his duties, introduction to the administrative duties of an elementary classroom, the privilege of working with individual children, small groups of children and an entire classroom under competent supervision, and the opportunity to receive feedback on performance from both the cooperating teacher and the college supervisor.

EDEL 305 READING IN THE CONTENT AREA **3 (3-0-0) Fall and Spring**

An investigation of the reading process as it applies to teaching students to read Social Studies, Science, English, Math, and Health textbooks in grades 1 through 12.

EDEL 325 DIAGNOSTIC AND REMEDIAL READING **3 (3-0-0) Fall and Spring**

Tests and techniques to prevent, detect and correct reading difficulties; special methods and materials for problem readers. *Prerequisite: EDEL 383.*

ED. 330 GUIDANCE AND COUNSELING TECHNIQUES **3 (3-0-0) Summer only**

The responsibility of the teacher in the guidance program of the school; the identification of student problems; significant information and its use; techniques in guidance and counseling.

EDEL 350 CHILD DEVELOPMENT**3 (3-0-0) Fall and Spring**

An interpretive description of human growth from conception through infancy, toddlerhood, pre-school and school years, adolescence and into maturity.

EDEL 360 CHILDREN'S LITERATURE**3 (3-0-0) Fall and Spring**

A study of the history of children's literature; types of literature useful for children in pre-school and elementary school; techniques of dramatic reading, story telling and choral speaking.

EDEL 380 TEACHING MUSIC**3 (3-0-1) Fall and Spring**

Designed for the elementary education major to develop the philosophy of music education, the ability to read music, the use of the singing voice, and the knowledge of music methods. Includes the use of classroom instruments, including piano, and the presentation of current music materials available for K-6.

EDEL 383 TEACHING OF READING IN THE ELEMENTARY SCHOOL**3 (3-0-0) Fall and Spring**

The reading process; normal development; characteristics of children learning to read; principles, problems, materials and techniques for the teaching of reading in the elementary school.

EDEL 384 TEACHING OF ELEMENTARY SCHOOL MATHEMATICS**3 (3-0-0) Fall and Spring**

Methods of teaching mathematics, examination of curriculum and materials pertinent to teaching mathematics in the elementary school, and development of mathematical skills required of the elementary school teacher.

EDEL 386 TEACHING OF SOCIAL STUDIES**3 (3-0-0) Fall and Spring**

Principles, problems, materials and techniques for the teaching of social studies in the elementary school.

EDEL 387 TEACHING OF SCIENCE**3 (3-0-0) Fall and Spring**

Principles, problems, materials and techniques for the teaching of science in the elementary schools.

EDEL 390 SEMINAR IN EARLY CHILDHOOD EDUCATION**4 (4-0-0)**

Taken in the senior year; an advanced seminar with focus on studies in Early Childhood Education. Emphasis is placed on student leadership and participation.

EDEL 392 TEACHING ART IN ELEMENTARY GRADES**3 (3-0-2) Fall and Spring**

The philosophy and principles of art education in the elementary curriculum; experience in the development of self-expression through a variety of materials and activities as the basis for understanding and evaluating children's work.

EDEL 400 STUDENT TEACHING**12 (0-0-30) Fall and Spring**

Practice teaching under supervision of master teachers. Required of all students working for a degree in teacher education.

EDEL 401 SEMINAR IN ELEMENTARY EDUCATION**2 (2-0-0) Fall and Spring**

Taken in the senior year; orientation and critiques concerned with classroom problems; examination of school law, school organization and administration.

EDEL 402 SELECTED TOPICS IN ELEMENTARY EDUCATION**1-3 (3-0-0) Fall or Spring**

The course is designed to give students the opportunity to carry out in-depth studies into various teaching techniques appropriate for use at the elementary school level. The course includes lecture discussions, seminar periods, and the use of resource persons. Heavy emphasis is placed on student leadership and participation as well as on the reading and discussion of recent educational literature. Open to in-service teachers and majors who have completed student teaching.

EDEL 403 COMMUNICATION SKILLS WORKSHOP FOR ELEMENTARY SCHOOL TEACHERS**3 (3-0-0) Fall and Spring**

The course is designed as a workshop experience for undergraduate students who have completed student teaching and for inservice classroom teachers. Emphasis will be placed on an open environment in which undergraduate students, practicing classroom teachers, and the instructor will investigate and share techniques to be used by the elementary school teachers to improve the total communication skills of children in elementary school classrooms. *Prerequisites:* Completion of Senior Student Teaching and consent of instructor.

EDEL 488 INFORMAL DIAGNOSIS OF READINESS IN ELEMENTARY TEACHING**3 (3-0-0) Fall or Spring**

The course is designed to help teachers become more aware of specific cognitive and affective factors which influence a child's readiness to learn. Emphasis will be placed on informal assessment of a child's cognitive and affective behavior as a basis for making decisions about instruction for a child. The course will provide experiences with the development and use of informal techniques which assess a child's cognitive and affective domain.

EDEL 489 ENVIRONMENTAL EDUCATION FOR ELEMENTARY TEACHERS**3 (3-0-0) Fall or Spring**

A study of the methods, materials, and science background necessary to teach environmental education in the elementary school. Emphasis will be on both science content and psychological grade placement of various activities.

ID 285 MODULE A: MAINSTREAMING**1****ID 285 MODULE B: READING****1-3****ID 285 MODULE C: GIFTED CHILDREN****1**

(See page 54 for course description.)

ID 499 INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION**2**

(See page 54 for course description.)

ID 201 INTERDISCIPLINARY STUDIES

3 (to be arranged)

Topics to be offered will vary. Studies involving more than one department or discipline shall be offered; course may be applied to meet the five areas of the General Education requirements, and with departmental approval may be applied to the major. Specific topics will be announced each semester prior to registration; consult such announcements for meeting hours, prerequisites; and other details.

ID 285 MODULE A: MAINSTREAMING

1

A multi-disciplinary approach designed to assist pre-professionals in understanding mentally and/or physically handicapped individuals with emphasis on the various provisions for their education with the least restrictive environment being the major orientation.

ID 285 MODULE B: READING

1-3

This module is designed to introduce pre-professionals to the understanding of the reading process. This introduction will guide them to select and use the most appropriate reading methods and materials adaptable to meet individual student needs in secondary classrooms. *Prerequisite: Approval of Department Chairperson.*

ID 285 MODULE C: GIFTED CHILDREN

1

A multi-disciplinary orientation concentrating emphasis on identification, characteristics, and programming for the gifted.

ID 499 INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION

2

Interdisciplinary study of issues, problems, literature, and research base for early childhood education programs. Focus on principles and practical procedures for delivery of effective early childhood education in a variety of settings. Methodology will include seminar discussions, team presentations, group work, case discussions, field trips, specialist speakers, and video tapes. *Prerequisites: For junior and seniors in EEd, Home Ec., SpED.*

ENGLISH

ENG 090 BASIC WRITING SKILLS

1 (3-0-0)

A course in basic English skills taught on the remedial level and designed to raise the student's level of literacy to the point where he is able to do college-level reading and writing.

ENG 112 COMPOSITION I

3 (3-0-0)

An intensive course in reading, writing and research on the college level. The reading and writing of expository prose will be emphasized, analytical and critical thinking stressed.

ENG 113 INTRODUCTION TO LITERATURE

3 (3-0-0)

An introduction to poetry, fiction and drama, this course is designed to help students read literature with understanding and enjoyment.

ENG 200 SURVEY OF ENGLISH LITERATURE I

3 (3-0-0) Fall

Masterpieces of English Literature from the Anglo-Saxon period to the end of the eighteenth century with emphasis on interpretation and critical evaluation. *Prerequisite: Grade of C in Eng. 112.*

ENG 201 SURVEY OF ENGLISH LITERATURE II

3 (3-0-0)

A continuation of Eng. 200. English literature from the eighteenth century to the present. *Prerequisite: Grade of C in Eng. 112.*

ENG 202 SURVEY OF AMERICAN LITERATURE I

3 (3-0-0) Fall

Major American writers from the colonial period to the Civil War. *Prerequisite: Grade of C in Eng. 112.*

ENG 203 SURVEY OF AMERICAN LITERATURE II

3 (3-0-0) Spring

A continuation of Eng. 202. American literature from the Civil War to the present. *Prerequisite: Grade of C in Eng. 112.*

ENG 210 LITERATURE OF THE WESTERN WORLD I

3 (3-0-0) Fall and Spring

Literary classics from ancient times to the close of the Renaissance. *Prerequisite: Eng. 112.*

ENG 211 LITERATURE OF THE WESTERN WORLD II

3 (3-0-0) Fall and Spring

A continuation of Eng. 210 from the Age of Reason to the present. *Prerequisite: Eng. 112.*

ENG 219 INTRODUCTION TO BLACK AMERICAN LITERATURE

3 (3-0-0) Fall and Spring

An introduction to the work of major black American authors, the course will survey the development of black American literature and investigate its relationship to black American and white American literature. *Prerequisite: Eng. 112.*

ENG 220 SPECIAL TOPICS IN LITERATURE

3 (3-0-0)

A flexible, open-ended course with specialized topics of interest to non-English majors. Topics and instructors will be announced prior to pre-registration period each semester. Course may be repeated for credit. *Prerequisite: Eng. 112.*

ENG 226 HISTORY OF THE ENGLISH LANGUAGE

3 (3-0-0)

A study of the development of the English language from Old English to modern times with special attention to the causes of linguistic change.

ENG 230 PRACTICAL WRITING**3 (3-0-0) Fall and Spring**

An intensive course for students who wish instruction and practice in report writing, business writing, and technical writing. Emphasis will be placed on the particular writing needs of each student. *Prerequisite:* Eng. 112.

ENG 232 ADVANCED COMPOSITION**3 (3-0-0) Fall and Spring**

Intensive writing in area of each student's principal interest. Students not majoring in English admitted by consent of instructor. *Prerequisite:* Eng. 112.

ENG 240 JOURNALISM**3 (3-0-0) Fall and Spring**

Fundamentals of reporting, editing, and writing feature articles. Emphasis on news gathering, news evaluation, and style and structures of news stories. *Prerequisite:* Eng. 112.

ENG 242 CRISIS REPORTING**3 (3-0-0) Spring**

Critical examination of the way major current issues are handled by the various media. Practice in writing, investigating and interviewing. *Prerequisite:* Eng. 240.

ENG 243 PRESS PERFORMANCE**3 (3-0-0) Fall or Spring**

An evaluation of the role of the contemporary American press in a modern democracy. Such problems as violence, sensationalism, and political bias will be investigated. *Prerequisite:* Eng. 240.

ENG 244 MEDIA DESIGN**3 (3-0-0) Fall or Spring**

A study of the principles of newspapers, magazine, book, and television design. Practice in designing pages for the print media and in writing copy for programs for the electronic media. The course will ordinarily center upon a few particular themes as they are adapted for presentation by each medium. These themes will include such contemporary issues as the Watergate investigation, summer and winter olympics, etc. *Prerequisite:* Eng. 240.

ENG 245 CREATIVE JOURNALISM**3 (3-0-0) Fall or Spring**

An introduction to the theory and practice of the New Journalism. Students will explore the culture and resources of the region, gathering materials for publishable articles. *Prerequisite:* Eng. 240.

ENG 246 INTERPRETATIVE JOURNALISM**3 (3-0-0) Fall or Spring**

An examination of the content, style, and techniques of contemporary interpretative news reporting in various magazines and newspapers. Attention to bias, libel, propaganda, ethics, and editorial columns. Practice in writing interpretative articles. *Prerequisite:* Eng. 240.

ENG 248 JOURNALISM PRACTICUM**3 (3-0-0) Fall or Spring**

An "internship" of work with local newspaper. Practice working on a publication, with attention given to the student's journalistic interest (news reporting, photography, editing) and the major aspects of production. *Prerequisite:* Eng. 240.

ENG 290 INTRODUCTION TO FILM CRITICISM**3 (3-0-0) Fall or Spring**

Analysis and evaluation of film through a study of its elements.

ENG 291 FILMS & FILMMAKERS**3 (3-0-0) Fall or Spring**

Analysis and evaluation of the feature-length film as a literary form.

ENG 300 TEACHING ENGLISH IN THE SECONDARY SCHOOL**3 (3-0-0) Fall or Spring**

Examination of the objectives, professional requirements, and specialized problems of English instruction; survey of material and aids for the teaching of the language arts in junior and senior high school; analysis of methods and trends, and practice in the development and presentation of programs of study.

ENG 302 THE SHORT STORY**3 (3-0-0) Fall and Spring**

Close reading and critical analysis of the short story as a literary form.

ENG 304 THE NOVELETTE**3 (3-0-0) Summer**

An historical survey from Boccaccio to Katherine Ann Porter.

ENG 306 RECENT LITERATURE**3 (3-0-0) Fall or Spring**

A study of the literature of the past ten years, predominantly English and American.

ENG 313 COMPOSITION II**3 (3-0-0)**

A review of previous composition courses and an advancement of reading and writing and research skills related specifically to student's advanced work in his major area of study. To be taken in the Junior year and to be passed with a grade of "C" or better before graduation.

ENG 315 BLACK RENAISSANCE**3 (3-0-0)**

A study of the Negro Renaissance, also known as the Harlem Renaissance (1910-1940). Black American writers produced much important literature during the Renaissance. The course will involve reading and discussing this literature, and exploring its significance both for black and white Americans.

ENG 330 LITERARY CRITICISM**3 (3-0-0) Spring**

Major theories of literary criticism from Aristotle to the present with application. Admission by consent of instructor.

ENG 335 CREATIVE WRITING**3 (3-0-0) Fall or Spring**

A discussion of theory and the relation of theory to practical writing situations. An exploration of writing which takes into consideration both the direction of the students' interests and the formal properties of fiction, poetry or play.

Eng 336 AMERICAN LITERATURE TO 1835**3 (3-0-0) Spring**

A study of major seventeenth and eighteenth century American writers emphasizing the literary and philosophical aspects of their work and locating them in the continuum of American literature and culture.

ENG 337 THE AMERICAN RENAISSANCE**3 (3-0-0) Spring**

A study of major mid-nineteenth century American writers with emphasis upon their work as works and as a part of a continuing literature and culture.

ENG 338 AMERICAN REALISM AND NATURALISM**3 (3-0-0) Fall**

A study of major Realists and Naturalists in American literature with an emphasis upon their works, their literary apology, and their influence.

ENG 339 CONTEMPORARY AMERICAN FICTION**3 (3-0-0) Fall**

A study of major writers of fiction emphasizing their works, their social consciousness, their influence on their own generation, and their probable influence on following ones.

ENG 340 MIDDLE ENGLISH LITERATURE**3 (3-0-0) Fall**

A study of representative work from the Anglo-Saxon period to 1500.

ENG 345 CHAUCER**3 (3-0-0) Spring**

A study of Chaucer in relation to his times with special emphasis on the *Canterbury Tales* and *Troilus and Cressida*.

ENG 350 WRITING WORKSHOP**3 (3-0-0) Spring**

A workshop in the writing of fiction and poetry and/or drama. The major emphasis will be upon application of techniques, development of sensibility, uses of the imagination, and revision of work. May be repeated. *Prerequisite:* Eng. 335.

ENG 355 SIXTEENTH-CENTURY POETRY AND PROSE**3 (3-0-0) Spring**

Poetry from Shelton and Wyatt to Sidney and Spenser; prose from More and Eliot to Hooker and Nashe.

ENG 358 SHAKESPEARE**3 (3-0-0) Fall**

Selected earlier plays of Shakespeare; interpretation and evaluation with attention to his development as a dramatist and poet.

ENG 359 SHAKESPEARE**3 (3-0-0) Spring**

A continuation of Eng. 358. Selected later plays.

ENG 360 SEVENTEENTH-CENTURY ENGLISH LITERATURE**3 (3-0-0) Fall**

Prose and non-dramatic poetry with emphasis on Jonson, Donne, and Dryden.

ENG 365 MILTON**3 (3-0-0) Summer**

The poet, the times, and the major works.

ENG 370 EIGHTEENTH-CENTURY ENGLISH LITERATURE**3 (3-0-0) Spring**

A study of major English writers representing basic attitudes and values of the Age of Reason and the pre-Romantic movement.

ENG 375 DIRECTED WRITING**3 (3-0-0) Fall**

Individual guidance and instruction in the composition of a novelette, a collection of stories or poems, or a play. *Prerequisites:* Eng. 335, 350 and consent of instructor.

ENG 380 THE ROMANTIC MOVEMENT**3 (3-0-0) Fall**

Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries; social and ideological factors; poetic theory.

ENG 382 VICTORIAN POETRY AND PROSE**3 (3-0-0) Fall**

Major British writers from 1830 to 1900; social and intellectual influences of the period.

ENG 384 THE BRITISH NOVEL TO 1870**3 (3-0-0) Fall**

Principal British novelists from Defoe to Dickens examined in relation to social and intellectual trends; analysis of form.

ENG 385 THE BRITISH NOVEL SINCE 1870**3 (3-0-0) Spring**

A continuation of Eng. 384 to the present.

ENG 388 ENGLISH DRAMA TO 1890**3 (3-0-0) Fall**

A survey of English dramatic literature beginning with the medieval morality, mystery, and miracle plays.

ENG 389 WORLD DRAMA**3 (3-0-0) Summer**

The work of Continental dramatists to Ibsen.

ENG 390 MODERN DRAMA**3 (3-0-0) Spring**

The work of major dramatists, primarily English and American, from Ibsen to the present; analysis of techniques of composition, production, and performance.

ENG 391 MODERN POETRY**3 (3-0-0) Spring**

Analysis of poetic method and of the integral nature of form and meaning in British and American poets from G. M. Hopkins to Dylan Thomas.

ENG 400 DIRECTED STUDY**3 (3-0-0)**

Individual study under the direction of a faculty member appointed by the department chairman. Admission by consent of the instructor.

ENG 401 SEMINAR IN ENGLISH STUDIES**3 (3-0-0) Fall and Spring**

Intensive reading and discussion of a major writer; class enrollment restricted to twelve. Basic bibliographical sources used for several long papers. Open only to juniors and seniors by consent of the instructor.

ENG 409 COMEDY OF MANNERS**3 (3-0-0)**

A comprehensive survey of the genre from 1660 to the present with concentration upon Etherege, Wycherley, Congreve, Sheridan, and Oscar Wilde.

ENG 497 INDEPENDENT STUDY**1-3**

(See page 20 for course description.)

FRENCH

FR. 101 INTRODUCTORY FRENCH I

3 (3-0-2) Fall and Spring

For students who have not previously studied French. Elements of grammar and reading, intensive drill in pronunciation, aural comprehension and speaking. Language lab attendance required twice a week.

FR. 102 INTRODUCTORY FRENCH II

3 (3-0-2) Fall and Spring

Continuation of Fr. 101. *Prerequisite:* One year of secondary school French or FR. 101 or its equivalent. Language lab attendance required twice a week.

FR. 201 INTERMEDIATE FRENCH I

3 (3-0-2) Fall and Spring

Independent reading, grammar review and further practice in aural comprehension and speaking. *Prerequisite:* Two years of secondary school French or one year of college French. Language laboratory attendance required twice a week.

FR. 202 INTERMEDIATE FRENCH II

3 (3-0-2) Fall or Spring

Continuation of Fr. 201. *Prerequisite:* Three years of secondary school French or Fr. 201. Language lab attendance required twice a week.

FR. 205 PHONETICS AND PRONUNCIATION

1 (1-0-1) Spring

A systematic study of French phonemes: pronunciation and phonetic transcription. Emphasis on phrase rhythm, musical accent. Theory and practice. Required of French majors. *Prerequisite:* Fr. 101 or equivalent.

FR. 210 FRENCH FOR TRAVELERS I

1-3 crs. Fall

A practical approach to current spoken and written French, including an introduction to the culture of French-speaking countries. *Prerequisite:* Fr. 102. May replace 201 or follow 202. May not be taken for major credit.

FR. 211 FRENCH FOR TRAVELERS II

1-3 crs. Spring

Continuation of French 210. A practical approach to current spoken and written French. *Prerequisite:* French 102. May replace or follow Fr. 202. May not be taken for major credit.

FR. 280 TOPICS IN FRENCH CIVILIZATION (HISTORY)

3 (3-0-0) Fall alternate years 1978

A brief survey of French history, with particular attention to major events and personalities. *Prerequisite:* Fr. 202 or equivalent training.

FR. 281 TOPICS IN FRENCH CIVILIZATION (GEOGRAPHY)

3 (3-0-0) Spring alternate years 1977

A study of the geography of French-speaking countries. *Prerequisite:* Fr. 202 or equivalent training.

FR. 282 TOPICS IN FRENCH CIVILIZATION (AFRO-FRENCH LITERATURE AND CIVILIZATION)

3 (3-0-0) Fall alternate years

A study of Black literature written in French in Africa and the West Indies. *Prerequisite:* Fr. 202 or equivalent training.

FR. 283 TOPICS IN FRENCH CIVILIZATION (CONTEMPORARY PROBLEMS)

3 (3-0-0) Spring alternate years

A study of the problems facing the people of French-speaking countries today. *Prerequisite:* Fr. 202 or equivalent training.

FR. 300 CONVERSATIONAL FRENCH AND CIVILIZATION

3 (3-0-0) Fall

Intensive practice in oral French intended for students interested in developing a higher degree of fluency. Emphasis on topics of cultural, social, economic and political nature. May be taken concurrently with Fr. 202 upon recommendation of the instructor. Required of French majors.

ED. 300L SECONDARY METHODS — FRENCH

3 (3-0-0) Spring

A study of the teaching of French with an emphasis on the problems, methods and materials associated with language teaching. *Prerequisite:* Junior standing. Required of all French majors in teaching education program.

FR. 305 ADVANCED FRENCH CONVERSATION

3 (3-0-2) Spring

An intensive training in oral self-expression for the student who desires a still higher degree of fluency. Specially programmed topics for each class session will be assigned, with emphasis on encouraging the students to carry on discussion in more detail and at greater length. *Prerequisite:* Fr. 300 or consent of instructor.

FR. 320 ADVANCED FRENCH STRUCTURE

3 (3-0-0) Fall

The study and practical application of the structural patterns of French with concentration on the phonology, morphology and syntax of the language. *Prerequisite:* completion of Fr. 202 or equivalent training. Required of French majors.

FR. 330 SURVEY OF FRENCH LITERATURE I

3 (3-0-0) Fall

Selected readings in the works of major French writers through the eighteenth century, outside reading and reports in French; consideration of literary movements, style and form. *Prerequisite:* Fr. 202 or equivalent training. Required of French majors.

FR. 331 SURVEY OF FRENCH LITERATURE II

3 (3-0-0) Spring

Selected readings in the works of major French writers since 1800; outside reading and reports in French; consideration of literary movements, style and form. *Prerequisite:* Fr. 202 or equivalent training; Fr. 330 also recommended. Required of French majors.

FR. 339 FRENCH LITERATURE OF THE MIDDLE AGES AND RENAISSANCE

3 (3-0-0) Fall alternate years 1978

Reading and discussion of the beginnings of French literature to the end of the 16th century. *Prerequisites:* Fr. 330 and 331.

FR. 340 FRENCH CLASSICAL LITERATURE

2 (2-0-0) Spring alternate years

Critical readings and discussion of the major dramatic works of Corneille, Moliere and Racine with supplementary reading on general background. *Prerequisites:* Fr. 330 and 331.

FR. 341 FRENCH LITERATURE OF THE ENLIGHTENMENT

3 (3-0-0) Fall alternate years

Reading and discussion of the works of Voltaire, Rousseau and Diderot. *Prerequisites:* Fr. 330 and 331.

FR. 342 CURRENTS IN NINETEENTH CENTURY FRENCH LITERATURE

3 (3-0-0) Spring alternate years

The works of French authors as well as the main currents and form of literary expression from the beginning of romanticism to the end of the century: Hugo, Balzac, Stendhal, Flaubert, Zola. *Prerequisites:* Fr. 330 and 331.

FR. 343 ASPECTS OF TWENTIETH CENTURY FRENCH LITERATURE

3 (3-0-0) Spring alternate years

Development of the novel: Gide, Alain-Fournier, Proust, Mauriac, Malraux, Sartre, Camus, Bernanos. St. Exupéry. Green and the nouveau roman. Reading and discussion of major works. Written report. *Prerequisites:* Fr. 330 and 331.

FR. 350 DEVELOPMENT OF FRENCH POETRY

2 (2-0-0) Spring alternate years

A study of the major works of poets from Villon to the present. Emphasis on interpretation and diction. Study of the French poetical system. *Prerequisites:* Fr. 330 and 331.

FR. 370-380 FOREIGN STUDY

Credit arranged

Foreign study is open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairman. Number of credits granted will be based upon validated credentials presented to the department. The student should register for French 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad.

FR. 400 SENIOR SEMINAR

Credit arranged

Special study projects in French language and literature; independent reading in the defined areas followed by written analytical reports in French. Open to seniors and in exceptional cases to juniors.

FR. 405 HONORS COURSE FOR FRENCH MAJORS

Credit arranged

An individual problems course. Open to qualified seniors with consent of the department.

FR. 497 INDEPENDENT STUDY

(See page 20 for course description.)

GERMAN

GER. 101 INTRODUCTORY GERMAN I

3 (3-0-2) Fall and Spring

Introductory elements of grammar and reading, intensive drill in pronunciation, aural comprehension and speaking. Language lab attendance is required twice weekly.

GER. 102 INTRODUCTORY GERMAN II

3 (3-0-2) Fall and/or Spring

Continuation of German 101. *Prerequisite:* Completion of Ger. 101 or equivalent competence. Language lab is required twice weekly.

GER. 201 INTERMEDIATE GERMAN II

3 (3-0-2) Fall and Spring

A review of the structure of the German language with a view toward improving the skills of aural comprehension, speaking, reading and writing. *Prerequisite:* Completion of Ger. 102 or equivalent competence. Language lab attendance is required twice weekly.

GER. 202 INTERMEDIATE GERMAN II

3 (3-0-2) Fall and Spring

A continuation of German 201 with emphasis on the further development of the skills, basing such development upon readings taken from actual literary and cultural selections. *Prerequisites:* Completion of Ger. 201 or equivalent competence. Language lab attendance is required twice weekly.

GER. 205 PHONETICS AND PRONUNCIATION, GERMAN

1 (1-0-1)

A systematic study of German phonetics, phonemics, pronunciation, intonation and rhythm. The theory of the speech and articulatory mechanisms will be studied and extensive practice exercises, both in class and in the laboratory, will develop the students' capability in proper pronunciation. *Prerequisites:* Ger. 102 or equivalent competence.

GER. 300 CONVERSATIONAL GERMAN AND CIVILIZATION

3 (3-0-0) Fall alternate years

Intensive practice in oral German intended for students interested in developing a higher degree of fluency in the spoken language. Emphasis on topics of cultural, social, economic and political nature. May be pursued concurrently with Ger. 202 upon recommendation of the instructor. Required of all German majors.

ED. 300L SECONDARY METHODS — GERMAN

3 (3-0-0) Spring

A study of the teaching of German with emphasis on the problems, methods and materials associated with language teaching. *Prerequisites:* Junior standing. Required of all German majors in teacher education program. (This is a requirement for teacher certification and credits so derived do not apply toward the major in German.)

GER. 305 ADVANCED GERMAN CONVERSATION

3 (3-0-0) Spring alternate years

An intensive training in oral self-expression for the student who desires a still higher degree of oral fluency. Specially programmed topics for each class session will be assigned, with emphasis on encouraging the student to carry on discussion in more detail and at greater length. *Prerequisite:* Ger. 300 or equivalent competence.

GER. 320 ADVANCED GERMAN STRUCTURE

3 (3-0-0) Fall

The study and practical application of the structural patterns of German with concentration on the phonology, morphology and syntax of the language. *Prerequisite:* Completion of Ger. 202 or equivalent competence. Required of all German majors.

GER. 321 COMPOSITION AND STYLISTICS

3 (3-0-0) Fall alternate years

Concentration on the development of self-expression in the written skills. Emphasis on synonymic development of expression and stylistic writing. Frequent written assignments, as well as at least one significant assignment of a critical nature will be presented. This course is intended for all German majors and especially for those who intend to teach German or pursue graduate work. *Prerequisites:* Completion of Ger. 202 (or equivalent preparation) and recommendation of instructor.

GER. 330 SURVEY OF GERMAN LITERATURE I

3 (3-0-0) Spring alternate years 1978

This course is designed to acquaint the student with some of the major literary movements and representative writers from 1750 to present. *Prerequisites:* Completion of Ger. 202 or equivalent preparation. Required of all German majors.

GER. 331 SURVEY OF GERMAN LITERATURE II

3 (3-0-0) Spring alternate years 1979

Sequel to Ger. 330. The earliest periods of German literature from 800-1750. *Prerequisites:* Completion of Ger. 202 or equivalent competence; Ger. 330 also recommended. Required of all German majors.

GER. 335 PROSEMINAR

3 (3-0-0) Fall and/or Spring

Selected topics from list I or other topics upon arrangement. Open to qualified students with sophomore standing or above. *Prerequisite:* Completion of Ger. 202 or equivalent competence. May be repeated for credit.

SEMINAR TOPICS I

1. Geographic, economic, technical, scientific and industrial aspects of the German speaking lands.
2. Aspects of the educational systems, the social structures, communications systems and mass media, transportation systems, etc.
3. Developments in art, music, legends, and folklore of the German speaking countries.
4. The states and major cities of the German speaking world and their significant character and contributions.
5. German literature of the 20th Century.
6. German literature of the 19th Century.

GER. 360 SEMINAR

3 (3-0-0) Fall and/or Spring

Selected topics from list II or other topics upon arrangement. Open to qualified students with junior standing or above. *Prerequisite:* Completion of Ger. 202 or permission of advisor and/or instructor. May be repeated for credit.

SEMINAR TOPICS II

1. Historic and political structures, religion and philosophy in the German speaking lands.
2. German Literature of the 18th Century.
3. German Lyric Poetry
4. The German Novel
5. The "Novelle"
6. German Drama

GER. 370-380 FOREIGN STUDY

Credit arranged

Foreign study is open to students who wish to continue the study of German abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairman. Number of credits granted will be based upon validated credentials presented to the department. The student should register for German 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad.

GER. 400 SENIOR SEMINAR

(3-0-0) Fall and/or Spring

Selected topics from list III or other topics upon arrangement. Open to qualified students with Senior standing or juniors by permission of instructor and advisor. May be repeated for credit.

SEMINAR TOPICS III

Heinrich Boll
Bertolt Brecht
Heinrich Heine
Friedrich Durrenmatt
Goethe
Schiller
Grass
Frisch
Hesse

GER. 497 INDEPENDENT STUDY

(See page 20 for course description.)

GEOGRAPHY AND REGIONAL PLANNING

GEOG. 102 HUMAN GEOGRAPHY

3 (3-0-0) Fall and Spring

An introduction to geography and a study of human communities in their relation to the environment; including a systematic study of population and culture as reflected in settlement, economic activities, land use and their resulting spatial patterns.

GEOG. 111 PHYSICAL GEOGRAPHY

3 (3-0-0) Fall and Spring

Introduction of the nature of geography and the physical aspects of the environment of man; the earth and its planetary relations; selected topics in physical geography, including weather, climate, soil, land-forms, the principles of map projection and interpretation.

GEOG. 222 ENVIRONMENTAL LAND USE AND NATURAL RESOURCES

3 (3-0-0) Fall or Spring

An analysis of environmental land use and natural resources as a response to the physical and cultural conditions of the past and present; and evaluation of the major divisions of land usage and the resulting interrelationship of areal patterns.

GEOG. 230 INTRODUCTION TO CARTOGRAPHY

4 (2-0-3) Fall and Spring

Introduction to the principles and tools of basic cartography. Emphasis on map projections, map design and map reproduction. The student will generally find it necessary to work independently in the cartography lab outside of class.

GEOG. 231 MAP PROJECTION AND INTERPRETATION

3 (3-0-0) Fall or Spring

Introduction to the use and evaluation of projections, maps, charts and aerial photographs. Emphasis on coordinate systems and topographic maps.

GEOG. 282 WORLD REGIONAL GEOGRAPHY

3 (3-0-0) Fall or Spring

Regional analysis and study of the earth as the home of man. Specific area and types of man-land relationships are studied as examples of the world variety of human adjustments to and adaptation of the natural environment. Course particularly well suited for future social science teachers.

GEOG. 312 WEATHER AND CLIMATE

3 (3-0-0)

A study of the basic principles of meteorology and climatology, including the synoptic approach to weather forecasting and the human use of climatological data and climatic classifications.

GEOG. 321 GEOMORPHOLOGY

3 (3-0-0) Fall, alternate years

The evaluation and development of land forms and the principal theories of landform development pertaining to structure, process and stage; topographic maps, profiles and the appraisal of geologic data from both field and laboratory studies. *Prerequisites:* Geog. 111 or permission of the instructor.

GEOG. 350 URBAN GEOGRAPHY

3 (3-0-0)

An analysis of the localization, structure and function of urban settlements and their supporting areas, progressing from simple relationships in small settlements to the complexities of modern metropolitan regions.

GEOG. 351 POPULATION GEOGRAPHY

3 (3-0-0) Fall or Spring

Studies the spatial aspects of world population numbers, densities, and qualities; emphasizing the economic and social characteristics and mobility of the world's population.

GEOG. 360 ECONOMIC GEOGRAPHY

3 (3-0-0) Fall or Spring

Relates modern methods of geographic analysis to the study of world patterns of primary projection: agriculture, herding, fishing, forestry and mining.

GEOG. 361 GEOGRAPHY OF MANUFACTURING

3 (3-0-0) Fall or Spring alternate years

Analyzes the activities of secondary production. Covers the distribution and consumption of minerals; principles and theory of industrial location; and an analysis of selected industries and manufacturing regions.

GEOG. 370 POLITICAL GEOGRAPHY

3 (3-0-0) Fall or Spring, alternate years

A systematic analysis of the geographical nature, policy, and power of the state. Analyzes the growth and development of states, boundary problems, population distribution, colonies, and internal and international political theories.

GEOG. 371 HISTORICAL GEOGRAPHY

3 (3-0-0) Fall or Spring, alternate years

A survey of the human geography of the past. Detailed study of topics including the characteristics of colonization, settlement and cultural landscape development in the evolving landscape. Special reference is made to American historical geography.

GEOG. 380 GEOGRAPHY OF THE UNITED STATES AND CANADA

3 (3-0-0) Fall or Spring

A geographic analysis of the physical environment, resources, industries, population and settlement of Anglo-America north of the Rio Grande. Particular emphasis on geographic regionalism and geographic problems common to the area.

GEOG. 381 GEOGRAPHY OF PENNSYLVANIA

3 (3-0-0)

Analysis of the regional patterns of Pennsylvania: topography, climate, water resources, mineral resources, and the historical development of economic regions within the state.

GEOG. 390 REGIONAL ANALYSIS OF SELECTED WORLD AREAS

3 (3-0-0)

A geographic interpretation of the spatial distributions of physical, socio-economic, political, settlement, and other cultural characteristics of selected world areas. (Selected areas dependent upon current interest and demands.) (May be repeated.)

GEOG. 402 ADVANCED HUMAN GEOGRAPHY

3 (3-0-0) Fall or Spring alternate years

A systematic study of the approaches, concepts, and methods of human geography. Emphasis is given to man-environment systems and the spatial structure of human behavior within a thematic rather than a regional framework. *Prerequisites:* Geog. 102 and Geog. 111.

GEOG. 470 WORLD PROBLEMS IN GEOGRAPHY

1-3 (1,2,3, 0-0)

Regional treatment of man-land environmental problems approached from the point-of-view of political geography, cultural geography, or economic geography.

GEOG. 492 FIELD STUDIES OR FIELD METHODS IN GEOGRAPHY

3 (3-0-0)

Introduction to the tools and techniques of geographic field investigation. Observation, note-taking, classification and mapping based on original field work is experienced.

GEOG. 497 INDEPENDENT STUDY

(See page 20 for course description.)

GEOG. 498 SENIOR SEMINAR IN GEOGRAPHY
3 (3-0-0) Fall or Spring

An overview of the nature, structure, concepts, techniques, and methodologies of academic geography. *Prerequisites:* Geography majors with Junior or Senior class standing.

GEOG. 499 HONORS COURSE IN GEOGRAPHY
3 (3-0-0)

A prerequisite of 18 hours of upper-level geography with at least a B average. The course is designed for upper-division students who can qualify for independent research which will be conducted under the direction and supervision of a designated faculty member of the Geography Department.

REG. PL. 102 INTRODUCTION TO REGIONAL PLANNING
3 (3-0-0)

An introduction to the use of Regional Planning as a tool for shaping the future man-made and natural environment. Students are introduced to man-land relationships that effect community well being. The tools used by government in managing these relationships for public benefit, and programs, policies, and activities required in recent planning legislation.

REG. PL. 342 LAND-USE POLICY
3 (3-0-0) Fall or Spring alternate years

An interpretive synthesis of the precepts and concepts of land-use that encourage and discourage geographic patterns on a changing landscape. Familiarizes the student with the economic, social, and political processes that are especially important for planning which is intended to move regions toward a particular goal, i.e., optimum use of a finite, conservable, primary resource. Consideration is also given to individual perceptual behavior as it affects regional development.

REG. PL. 352 RECREATIONAL LAND-USE PLANNING
3 (3-0-0) Fall or Spring alternate years

An inquiry into the meaning, types, and demands of man's recreational activities. Planning emphasis will be given to the definition of problems and purposes and to the consideration of alternative resources for recreation, both physical and cultural. Some consideration will be given to the question of environmental perception and how it affects regional development and individual behavior. *Prerequisites:* Geog. 102 or Geog. 111, both would be recommended, or by the approval of the instructor.

REG. PL. 362 TECHNIQUES OF GEOGRAPHIC MEASUREMENT
3 (3-0-0) Fall or Spring alternate years

An introduction to the many and varied methods of geographic measurement such as aerial photographic interpretation, remote sensing, data-gathering techniques, and statistical-computerized analysis. The course is not intended to develop these skills but to familiarize the student with the more advanced methodologies of geographic field research.

REG. PL. 430 MODERN CARTOGRAPHIC TECHNIQUES
3 (3-0-0) Fall or Spring alternate years

Advanced elements of map design and reproduction. Emphasis on contemporary media used in presenting quantitative data. The course is organized into three modules. The first, "Computers Mapping," should be particularly useful to students from the social and behavioral sciences, and has no prerequisites. The remaining two modules, "Thematic Maps" and "Practicum" require Geog. 230 as a prerequisite.

REG. PL. 450 SETTLEMENT SYSTEMS
3 (3-0-0) Fall or Spring alternate years

Analysis of the spatial aspects of human settlement problems, including race, sprawl, pollution, transportation, land-use, planning and rehabilitation. Principal focus on America's urban and rural settlements.

REG. PL. 460 TRANSPORT SYSTEMS
3 (3-0-0) Fall or Spring alternate years

Analysis of the spatial principles and networks of transport systems, including factors of route location, theories of interaction, and the role of transport in space-economy.

REG. PL. 480 TOPICAL SEMINARS IN REGIONAL PLANNING
3 (1-2-0)

Seminars that consider the decision-making, problem-solving techniques of the planning process with topical emphasis. Seminars reflect inter-disciplinary and pluralistic nature of the planning process. (May be taken for credit more than one time. Each seminar will be identified by topical emphasis.)

REG. PL. 494 PLANNING INTERNSHIP
12 Sem. Hrs., 1 Acad. Term

The opportunity to apply knowledge and skills of planning. An experience in regional or corporate planning offices under the supervision of qualified planners. During this period, observation and conferences are scheduled by the student's advisor and evaluation is made of performance by the supervisory agency. The student is expected to complete at least two individually designed projects of research and field work approved by the advisor in addition to the applied planning practices of the cooperating agency.

REG. PL. 496 PLANNING SEMINAR
3 (3-0-0) Fall or Spring alternate years

Topical planning discussions of selected current problems, techniques, and research. Individual student research is directed into special fields of inquiry: (1) Coordination within a total national planning system. (2) Communication and education between planners and citizen groups. (3) Regulatory action at all levels of government. (4) Geographic research in variables that contribute to the problems of the cultural environment. (5) Alternates of specific land-use problems. e.g., land for solid waste disposal.

REG. PL. 497 INDEPENDENT STUDY
(See page 20 for course description.)

GEOLOGY

GEOL 101 EARTH RESOURCES AND ENERGY

3 (2-0-2)

This course deals with our natural resources, metallic, non-metallic and fossil fuels. Points emphasized include the world-wide abundance and distribution of the resources and the economics of the extractive industries. The fossil fuels, of extremely finite supply, lead into alternative sources of energy and their feasibility.

GEOL 121 PHYSICAL GEOLOGY

3 (2-0-2)

A study of the solid portion of the earth, the materials of which it is composed and the processes which are acting on it. Included are such topics as rocks and minerals, weathering and geologic structure.

GEOL 122 HISTORICAL GEOLOGY

3 (2-0-2)

A study of earth history using the principles of Geol. 121. This includes theories of earth origin, fossils, geologic time and the various techniques used to unravel geologic history. Emphasis is placed on collection and interpretation of evidence gathered in the field and from library research.

GEOL 232 MINERALOGY

3 (1-0-4)

A detailed study of minerals emphasizing their composition, origin, mode of occurrence, alteration, classification and identification. *Prerequisite: One year of college chemistry, which may be taken concurrently.*

GEOL 251 PALEONTOLOGY

3 (1-0-4)

A detailed study of the fossil remains of animals and plants. Special emphasis is given to the methods of studying fossils, the structures by which the fossils are identified, similarities of fossils to living organisms, and the significance of fossils.

GEOL 351 STRUCTURAL GEOLOGY

3 (3-0-0)

The analysis of geologic structures and their causal mechanism is approached through applied physics and mathematics. Understanding of the simple geologic structures leads into the world-wide tectonic pattern and the concepts of "continental drift" and "sea floor spreading." *Prerequisite: Geol. 121.*

GEOL 352 STRATIGRAPHY AND SEDIMENTATION

3 (2-0-2)

An extensive study of the genesis and distribution of the sedimentary rocks and the reconstruction of the paleo-environment. Sedimentary processes and environments of deposition will be studied through detailed analysis of reference sections using the principles of correlation, facies changes, tectonics, and paleontology. *Prerequisites: Geol. 251 or permission of instructor.*

GEOL 372 AERIAL PHOTO INTERPRETATION

3 (2-0-2)

The interpretation of aerial photographs from a geologic standpoint. Emphasis will be placed on recognizing the underlying geologic structures. It is recommended that Geol. 121 be taken prior to or concurrently.

GEOL 401 FIELD TECHNIQUES IN GEOLOGY

3 (1-0-4) Summer

A field oriented course where the student learns actual data collection methods. Methods vary with the problem, but include planning field work, identifying and measuring all parameters of the outcrop and sampling techniques. Different surveying methods are used in locating outcrops. Interpretation of the field data is an integral part of the course.

GEOL 412 GLACIAL GEOLOGY

3 (3-0-0)

An analytic study of glaciers and the Pleistocene epoch. The origins and mechanics of glacier motion and the landscape features produced during glaciation will be studied. Causes of ice ages and their distribution through geologic time and the methods of Pleistocene stratigraphy will also be considered. *Prerequisite: Geol. 121.*

GEOL 450 ENVIRONMENTAL GEOLOGY

6 (2-0-8)

This is a rigorous field-oriented course. Selected topics of Physical Geology are pursued in depth and related to man's use and abuse of his environment. Morning lectures are followed by field trips to observe the phenomena. During the first four weeks the student will also learn geologic investigative techniques. The fifth week the students will spend full time in the field working on an independent problem. There is a written scientific paper of the independent problem. *Prerequisite: Consent of the instructor.*

GEOL 497 INDEPENDENT STUDY

1-3

(See page 20 for course description.)

HEALTH AND PHYSICAL EDUCATION

HPE 100 HEALTH (PERSONAL AND COMMUNITY)

2 (2-0-0) Fall and Spring

Health education to include health services, health instruction and health environment dealing with contemporary principles, practices and concepts serving personal, family and community health. Includes individual counseling and guidance.

HPE 101, 102, 203 PHYSICAL EDUCATION

(2-0-0) Fall and Spring

Emphasis on the development of fundamental skills in season activities for individual, dual and team sports. Participation in lifetime activities to include aquatics and various areas of dance. One credit per semester.

HPE 205 INTERCOLLEGIATE ATHLETICS

1 (0-0-2) Fall and Spring

Course is designed as an upper level skill class available only to individuals on varsity teams with the following stipulations: allowed to enroll only one time, admission by the coach of particular sport, and to receive credit the student must remain in the sport involved for the entire season.

HPE 225 WATER SAFETY INSTRUCTOR

2 (1-0-2) Fall and Spring

The course will prepare students with the knowledge and practical experience in teaching swimming (ten basic strokes and basic spring board diving) from the non-swimmer level to advanced senior life saving. *Prerequisite:* Successful completion of HPE 203, *Advanced Life Saving*.

HPE 300 TECHNIQUES OF COACHING TRACK AND FIELD

3 (3-0-0) Fall

The participation in actual training techniques in track and field. An attempt to show prospective coaches what an athlete experiences in his training and an opportunity to select various programs and techniques to meet individual needs. Planning, organizing equipment for a track program will be studied.

HPE 305 COACHING AND OFFICIATING WRESTLING

3 (2-0-2)

Practical training in the areas of wrestling fundamentals, match and tournament wrestling, strategy and the psychology of coaching. Practical training in fundamentals of officiating, rule interpretation and preparation for taking tests to become an approved official.

HPE 310 SPECIAL PHYSICAL EDUCATION FOR THE EXCEPTIONAL CHILD

3 (3-0-0)

A comprehensive analysis of the physically, emotionally, and socially handicapped student. Includes selected activities and achievement standards in the field of health, physical education and athletics. These activities will be changed from year to year to assure that a progressive sequence of learning is present.

HPE 315 ATHLETIC TRAINING

3 (1-1-2)

A course designed to provide experiences in application of various methods in treatment of athletic injuries. A study of preventive measures and medical management of athletic injuries. Experience in use of exercise techniques and physical modalities.

HPE 320 BASIC FOOTBALL

3 (1-1-2) Spring

The student is given the opportunity to acquaint himself with the methods, techniques and psychology used in coaching football. The purpose of the course is to teach the methods, techniques and psychology used in coaching football, to give the prospective coach a knowledge of the personal problems in motivating and handling individual players, to teach the prospective coach the various types of offensive and defensive formations employed in football, to give the prospective coach an understanding of the need for, and familiarity with a detailed daily and progressively integral program for the entire season, and to give the prospective coach an understanding of the importance of the care and careful purchase of equipment.

HPE 330 COACHING BASKETBALL

3 (1-1-2) Fall

Practical training in the areas of basketball fundamentals, individual and team play, strategy and the psychology of coaching. This course will supply practical knowledge and techniques in the skills needed for basketball coaching.

HPE 340 SAFETY AND FIRST AID, (STANDARD AND ADVANCED)

3 (1-1-2) Fall

Study and application of the methods, techniques and psychology used in first aid and safety. Basic, Multi-Media, SFAPS and CPR Certification included.

HPE 350 METHODS I, TEACHING HEALTH AND PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS

2 (2-0-0) Fall and Spring

Principles, problems, materials and techniques for conducting the health and physical education programs in the elementary schools.

HPE 360 KINESIOLOGY

3 (3-0-0)

Analysis of human motion based on anatomical and mechanical principles. Fundamental principles of muscle action pertaining to movement. Applications of mechanics to sports activity. *Prerequisites:* BIO. 331 and BIO. 332.

HPE 370 PHYSIOLOGY OF EXERCISE

3 (3-0-0)

Critical analysis of physiological bases of muscular activity with special attention to general effects of exercise on body function. *Prerequisites:* BIO. 331, BIO. 332, HPE 360.

HPE 375 ADVANCED ATHLETIC TRAINING

3 (2-0-2)

A course designed to use exercise techniques and physical modalities. The physiological basis, indications and contraindications are presented. Also a review of special problems in the management of an athletic training program.

HPE 390 COACHING BASEBALL

3 (3-0-0) Fall

Course will provide students the knowledge, skills and attitudes to prepare them to coach high school baseball programs, dealing with organization factors of coaching as well as the strategies and skills of the game. Safety factors and the handling of minor injuries will be covered and special stress will be put on the educational aspect of coaching. Special field instruction will be provided when practical.

HISTORY

HIST 101 WESTERN CIVILIZATION I 3 (3-0-0)

A survey of significant ideas, events, and cultural developments in Western history from the emergence of ancient civilization to early modern times. (Circa 1660)

HIST 102 WESTERN CIVILIZATION II 3 (3-0-0)

A continuation of History 101. From early modern times to the present.

HIST 104 THE WORLD IN THE TWENTIETH CENTURY 3 (3-0-0)

A study of the forces and concepts operating in the modern world with emphasis on the trouble spots at the present time. For non-history majors only.

HIST 201 AMERICAN HISTORY THROUGH THE CIVIL WAR 3 (3-0-0)

A survey of American history covering the 17th century colonization; independence and formation of the federal union; nationalism, sectionalism and growth of democracy in the 19th century; and the Civil War.

HIST 202 AMERICAN HISTORY — RECONSTRUCTION TO THE PRESENT 3 (3-0-0)

A continuation of History 201, covering significant trends and events in the rise of modern industrial American and its emergence as a world power.

HIST 205 HISTORY OF SPORTS IN AMERICAN SOCIETY 3 (3-0-0)

Topics covered include the evolution of major sports, the influence of organization and technology, critics of sports, racism, the Nazi Olympics, a comparison with sports in other countries, the role of women and labor relations within sports, sports in the school, and the lives and times of various sports heroes.

HIST 210 HERSTORY: THE AMERICAN SIDE OF WOMEN'S PAST 3 (3-0-0)

A survey of life stories, experiences, and thoughts of American women, 1607-1973. The course treats such themes as the changing expectations of women and men in society, women in the labor force, and the equal rights movement.

HIST 232 AZTECS, INCAS, MAYAS 3 (3-0-0)

A study of the achievements, values, and organization of three Indian societies before the arrival of Columbus. Classes will discuss a number of multi-disciplinary topics including the nature of societal evolution, the implication of a non-monetary economy, the benefits of alternative systems of government and justice, the purpose of polytheistic religions, and the reasons for the decline of a civilization.

HIST 240 MAKERS OF HISTORY 1-3 (3-0-0)

The study of history through biography with an emphasis on historical figures who have influenced the course of events as well as on how events have shaped the lives of the makers of history. Some examples are Hitler, Stalin, Churchill, Erasmus, Luther, St. Ignatius, Ghandi, Mao, Ho Chi Minh.

HIST 250 EAST EUROPEAN HISTORY 3 (3-0-0)

A survey of East European cultures, peoples, and states, with emphasis on the rise and development of national consciousness (1800-1850) among the East Europeans.

HIST 260 HISTORY OF CRIMINAL JUSTICE 3 (3-0-0)

The evolution of crime and criminal justice systems in the ancient world, England, and, primarily, the United States.

HIST 288 EASTERN RELIGIONS 3 (3-0-0)

An overall view of the major religions of Asia — Islam, Buddhism, Hinduism, and Confucianism. An analysis of the basic beliefs and duties of these religions and the effect of these religions on Asian culture.

HIST 295 TOPICS IN HISTORY 1-3 (3-0-0)

This course is designed for lower division students, majors and non-majors, who desire a course in a special area that is of current interest. Various topics will be offered each semester.

HIST 300 HISTORIOGRAPHY 3 (3-0-0) Fall only

This course introduces the student to the discipline, methods, and techniques of historical research and writing and also the major interpretations of history and historiographical writings. Required of all history majors in the junior year.

HIST 301 HISTORY OF COLONIAL AMERICA TO 1788 3 (3-0-0)

A study of the exploration and settlement of North America with special emphasis on the 13 English colonies. The various political, social and economic developments in the American colonies to 1788 will be examined.

HIST 302 CONSTITUTION TO MANIFEST DESTINY 1789-1850 3 (3-0-0)

This course will give particular emphasis to the movement for American independence and events during the Revolutionary War and early national period.

HIST 304 HISTORY OF THE CIVIL WAR AND RECONSTRUCTION 3 (3-0-0)

The background of sectional controversy; constitutional issues, secession and military conflict; the aftermath of the war, North and South, with particular emphasis on political development in the period of reconstruction ending in 1877.

HIST 306 AMERICA BETWEEN THE WARS 3 (3-0-0)

American politics, diplomacy and society in World War I, the nervous Twenties, the Depression Decade, and World War II.

HIST 307 CONTEMPORARY AMERICA 3 (3-0-0)

American political, diplomatic and social developments in the Atomic Era.

HIST 310 BLACK MAN IN WHITE AMERICA 3 (3-0-0)

Topical foci include African heritage, Atlantic slave trade, American slavery, Civil War and Reconstruction, segregation and disfranchisement, the Harlem Renaissance, and Black Revolution. Thematic emphases center upon the black resistance and the quest for a black identity.

HIST 315 HISTORY OF SOCIAL WELFARE IN AMERICA 3 (3-0-0)

This course will examine the development of the public welfare system as a mirror reflecting Americans' changing attitudes toward misfortune and relief. Thematic emphasis will center upon a central issue of historical evaluation and contemporary policy: the appropriate balance between assistance-security and work-independence objectives in public welfare efforts to relieve misfortune.

HIST 340 THE ANCIENT WORLD

3 (3-0-0)

A study of the ancient world dealing with the growth and development of cultural, social and intellectual foundations that formed the basis of our present institutions. The development of classical life and thought will be analyzed through a study of the great civilizations of Greece and Rome.

HIST 345 MIDDLE AGES: LIFE AND STYLE

3 (3-0-0)

The political, socio-economic and cultural development of the civilization of Medieval Europe from the fall of Rome to the Medieval synthesis in the High Middle Ages.

HIST 346 RENAISSANCE AND REFORMATION

3 (3-0-0)

An examination of the political, social, economic and cultural forces involved in the transition from Medieval western society with particular attention to the rise of national states and the growth of individualism.

HIST 351 RISE OF MODERN ENGLAND

3 (3-0-0)

A survey of the social, political, economic and constitutional themes that have shaped modern England since 1688.

HIST 359 RUSSIA: BEGINNING TO 1917

3 (3-0-0)

After considering the basic problems in Russian historiography, the course will deal with the nature and development of the Russian Empire from the time of Peter I to the Revolution of 1917. Comparing the development of Russia with that of other states and an examination of the essential roots underlying the modern Soviet state will also be essential to this course.

HIST 361 BEGINNINGS OF MODERN EUROPE

3 (3-0-0)

The emergence of European states in the sixteenth, seventeenth, and eighteenth centuries with a focus on domestic and international developments.

HIST 364/365 EUROPE IN THE TWENTIETH CENTURY

3 (3-0-0)/ 3 (3-0-0)

A study of political, economic and cultural developments in Europe in the twentieth century with particular attention given to the factors involved in the two World Wars and their global impact and significance. First semester, 1914-1939, second semester, World War II and its aftermath.

HIST 375 COLONIAL LATIN AMERICAN

3 (3-0-0)

A discussion of the colonial era focusing on Pre-Columbian civilizations, the conquerors, the creation of Spanish and Portuguese institutions for mastery of a multi-racial society, the reforms of the 18th century and the independence struggles.

HIST 376 MODERN LATIN AMERICA

3 (3-0-0)

A survey of the modern period emphasizing the difficulty in creating a national self-identity, the impact of liberal and conservative philosophies on the 19th century, and the viability of revolutionary vs. non-revolutionary approaches to the problems of 20th century Latin America.

HIST 385 HISTORY OF THE MIDDLE EAST

3 (3-0-0)

The major political, economic and cultural features of the Middle East with particular emphasis on modern colonialism in the area, Zionism, and the Arab states' contemporary relations with other nations of the world.

HIST 386 HISTORY OF SOUTHEAST ASIA

3 (3-0-0)

A survey of the histories of peoples and states of Southeast Asia, Burma, Thailand, Cambodia, Laos, Vietnam, Malaysia, Indonesia, and the Philippines. The course covers the history of Southeast Asia from the Portuguese impact in the 16th century to the influence of the United States in the 20th century. Southeast Asia is examined in the age of imperialism, colonialism, nationalism, and independence.

HIST 387 HISTORY OF THE FAR EAST

3 (3-0-0)

A study of the traditional cultures and institutions of China and its role in Korea and Southeast Asia; the role of Western powers in China's development; post-war changes; United States foreign policy in relation to the Far East; and the emergence of Communist China.

HIST 401 HISTORY OF PENNSYLVANIA

3 (3-0-0)

A study of the founding and development of Pennsylvania, emphasizing the social, political, and economic characteristics of the Commonwealth; the diversity of its people; the state's contributions to the rest of the nation.

HIST 406 THE WESTWARD MOVEMENT IN AMERICA

3 (3-0-0)

A discussion of the settlement of the various geographic areas comprising the United States and the influence of westward expansion on the political, social and economic development of the American people. Deals with the trans-Mississippi West.

HIST 420 THE TEACHING OF HISTORY IN THE SECONDARY SCHOOLS

3 (3-0-0)

Each student in this course will be involved in the creation of a teaching unit in history directly transferable to the secondary teaching situation. He will be required to research and organize content material utilized within each unit and develop appropriate teaching approaches to facilitate instruction. Topics such as warfare, diplomacy, modern revolution, the role of women, economics, minority groups, politics, and other areas appropriate for study in secondary units or mini-courses will be developed on an historical-comparative approach to enable students to see trends and make comparisons.

HIST 430 THE AMERICAN INDIAN: FROM BERING TO RED POWER

3 (3-0-0)

This course deals with the origins, culture and history of the American Indian. The development of Indian policy by colonial rulers as well as the United States will be studied and compared. Problems of assimilation and cultural conflict resulting from removal as well as modern Indian problems will be discussed in detail.

HIST 444 INTRODUCTION TO HISTORICAL MUSEUM PRESERVATION AND SOCIETIES

3 (3-0-0)

This course is designed to provide a broad background regarding museum work, historical societies and their function, and historical preservation. This course will help prepare students for internships and potential careers in the field of museology and preservation.

HIST 450 HISTORY INTERNSHIP

3-12 credits

The history internship is designed to provide pre-professional skills to interested history majors and, under special circumstances, to non-majors as well. Museum and archival work are examples of areas in which students can bring together academic training and practical experience. As a *prerequisite the student needs the consent of a sponsoring member of the history department, the chairman, and an agency.*

HIST 451 FRANCE: FROM THE REVOLUTION TO THE PRESENT

3 (3-0-0)

A survey of the social, political, economic and constitutional themes that have shaped modern France since 1789.

HIST 454 MODERN GERMANY

3 (3-0-0)

A consideration of the forces of German unity since the rise of Brandenburg-Prussia with emphasis on the influence of Frederick the Great, the Bismarckian accomplishment of 1870 and Imperial, Weimar and Nazi Germany.

HIST 458 THE SOVIET UNION

3 (3-0-0)

A history of the Bolshevik Revolution and the founding of the Soviet Union: emphasis is on the internal and external factors involved in world Communism and Soviet power politics.

HIST 470 HISTORY OF MEXICO

3 (3-0-0)

A survey of Mexican history from pre-Columbian civilizations to the present. Particular attention will be given to the interaction of various racial groups, the formation of a distinct Mexican national identity and class conflicts.

HIST 496 SEMINARS ON SELECTED TOPICS

3 (3-0-0)

Open to history majors in the senior year. This course will provide the student with in-depth knowledge of historical methodology and research. Significant historical problems in history are selected for oral discussion.

HIST 497 INDEPENDENT STUDY

1-3 credits

(See page 20 for course description.)

HOME ECONOMICS

HEc 100 HOME ECONOMICS ORIENTATION

1 (1-0-0) Fall

Survey of home economics philosophy and professional orientation, emphasizes historical and sociological development of the family as the central theme of home economics.

HEc 101 CLOTHING AND MAN (CORE COURSE)

3 (3-0-0) Fall and Spring

An exploration of clothing selection based upon art principles, the fashion clothing industry, the social psychological implications of clothing for the consumer, textiles, and laws and trade regulations relating to clothing and textiles.

HEc 102 FUNDAMENTALS OF FASHION

2 (2-0-0) Spring

Art principles related to fashion and to fashion trends. A study of design in couture and ready-to-wear clothing. An in depth analysis of figure types. *Prerequisite:* HEc 101.

HEc 111 NUTRITIONAL ECOLOGY OF MAN (CORE COURSE)

3 (3-0-0) Fall and Spring

A study of the psychological, cultural, sociological and economic aspects of food with national and world implications. A study of the principles of nutrition and basic food groups with assessment of the students' dietary habits.

HEc 121 PERSONAL AND FAMILY MANAGEMENT (CORE COURSE)

2 (2-0-0) Fall and Spring

An introductory course focusing upon techniques of personal and family management. The course emphasizes management of individual and family resources as related to human needs, values, and goals. Experiences will be provided and exploration made of decision-making as influenced by such factors as family life cycle, life styles, man-woman roles, socio-economic variations, and aspirations of individual and family members. Management and conservation of time, energy, income, community and environmental resources will be analyzed.

HEc 131 INTRODUCTION TO CHILD AND FAMILY (CORE COURSE)

2 (2-0-0) Fall and Spring

A core course to facilitate choices available in home economics to provide basic knowledge in child and family.

HEc 201 FUNDAMENTALS OF CLOTHING CONSTRUCTION

3 (1-0-4) Fall and Spring

An introduction to pattern and fabric selection, to the variety of construction techniques, and to the methods of fitting garments. Directed laboratory experience provides an opportunity to solve individual clothing problems through the application of principles.

HEc 210 SOCIAL USAGE

1 (1-0-0) Fall and Spring

A survey of contemporary influences on accepted standards of conduct in professional and social situations.

HEc 215 PRINCIPLES OF FOOD

3 (1-0-4) Fall

The application of physical and chemical principles as related to the selection, preparation and preservation of food.

HEc 216 FOOD FOR THE FAMILY

3 (1-0-4) Spring

Consumer education concerning food production, marketing, and purchasing. Meal-time management including planning, preparation and service of meals. *Prerequisite:* HEc 111 and 215 or permission of the instructor.

HEc 224 HOUSEHOLD EQUIPMENT

2 (1-0-2) Fall and Spring

Selection, use, care, and testing of household appliances and equipment. Development of an awareness of criteria for evaluating equipment for wise selection.

HEc 231 THE FIRST YEARS OF CHILDHOOD

3 (2-0-2) Fall and Spring

An overview of the child from conception to age five; practical experience in determining and understanding the parent and teacher in facilitating optimal development of the very young child. Observation of and participation with the children in the Early Childhood Education Center. *Prerequisites:* Psy. 100, HEc 131; or by permission of the instructor.

HEc 232 THE AMERICAN FAMILY

3 (3-0-0) Fall and Spring

A study of the American Family throughout the life cycle including a brief historical overview of the family in the western world; emphasizes contemporary families, their life styles, values, and contingent standards; analyzes aspects of family life and culture across generations through a basic genealogical study. Utilizes current research findings.

HEc 301 INTERMEDIATE CLOTHING

3 (1-0-4) Fall and Spring

A further study of construction skills and techniques as they relate to fabrics. Special consideration is given to fitting garments. Tailoring techniques are introduced. This course may not be scheduled after HEc 303, 403, or 404.

HEc 302 APPAREL DESIGN ANALYSIS

3 (3-0-0) Fall

Opportunity is provided for the analysis of the concepts and principles of design and color as applied to apparel. Includes analysis of designs and the interrelationships of aesthetic principles, function, materials, and technical procedures. *Prerequisite:* HEc 102.

HEc 303 TAILORING

3 (1-0-4) Fall and Spring

The major emphasis is placed on the difference between custom and speed tailoring, and the selection of tailoring fabrics and their relationship to design. Tailoring construction techniques are related to individual problems. *Prerequisite:* HEc 301 or a grade of B in HEc 201.

HEc 304 CLOTHING PRODUCTION, DISTRIBUTION AND CONSUMPTION

3 (3-0-0) Spring

A study of the clothing field as an economic force. Analysis of fashion trends and their effect on production and distribution in manufacturing as these affect the consumer. *Prerequisite:* None for Consumer Service majors in the Clothing and Textile Option; available to other students by consent of the instructor.

HEc 305 STRUCTURES AND PROPERTIES OF FIBERS

2 (2-0-0) Fall

The study of the chemical and physical structures of fibers and the resulting properties. *Prerequisite:* Chem 102.

HEc 317 PEDIATRIC NUTRITION

3 (1-0-4) Fall or Spring

Nutritional needs of the unborn, infant, toddler, school age and teenage individual, with study of several factors influencing these needs. *Prerequisites:* HEc 111, HEc 215, HEc 216; or by consent of the instructor.

HEc 321 CONSUMER ECONOMICS (CORE COURSE)

3 (3-0-0) Fall and Spring

An introductory look at the consumer's role in American society. The focus of the course is on individual decision-making and the knowledge necessary for best achieving satisfaction based on personal goals and value system. The major emphasis of the course is on consumer rights: the right to be informed, the right to choice, the right to safety, and the right to be heard. In addition to an overview of the realities of the marketplace and avenues for consumer protection, the course features tactics and techniques for consumer survival.

HEc 323 INTERIOR ENVIRONMENT (CORE COURSE)

3 (2-0-2) Fall and Spring

Major emphasis is placed on the home in terms of design, construction, furnishings, adornment, function and cost through such unifying themes as use, economy, beauty, and individuality. The history of environmental design, as it evolved in Italy, Spain, France, England, and the United States complete our historical heritage. Three skills are required of students majoring in home economics education including furniture refinishing, upholstering and drapery headings. Students other than home economics education majors may select a subject matter research paper in lieu of one or all of these skills. It is the purpose of this course to help students make their home responsive to the functional and personality needs of the family and individuals. *No prerequisites.*

HEc 330 CHILD AND FAMILY AGENCIES

3 (1-1-2) Spring

A lecture-seminar course to familiarize the student with the various agencies, both public and private, that serve the child and family. A one-day selected observation experience is required. *Prerequisites:* HEc 131, 231, 232, or by permission of instructor.

HEc 332 THE ADOLESCENT

3 (3-0-0) Fall

A study of adolescents and their development in relation to self, family, education and the social order, with emphasis on their characteristics and needs; examination of issues affecting the adolescent.

HEc 333 PARENT/CHILD STUDY

3 (2-0-2) Spring

A study of current programs and research findings concerning parental and environmental influences which determine the direction of and facility for total development. Includes observation and participation with young children. Opportunity for a case study.

HEc 334 ISSUES IN CONTEMPORARY FAMILY LIFE

3 (3-0-0) Fall

Provides for an in-depth study of one or more issues the student will wish to explore following a broad presentation of those issues that are perennial, and those that are current for families and their members. *Prerequisites:* Psy 101, HEc 131, or by permission of the instructor.

HEc 335 PLAY AND CREATIVE ACTIVITIES IN CHILDHOOD

3 (1-1-2) Summer by sufficient request

In-depth emphasis on the contributions of play and creative activities to physical, emotional, social, and intellectual development. Includes initial observation and interpretation of the child's behavior in a controlled situation; opportunity to exercise ingenuity to devise play and creative activities in a variety of play and role playing situations. Seminars to discuss observation and participation. *Prerequisites:* HEc 231, HEc 232; or by permission of the instructor.

HEc 336 ADULTHOOD AND AGING

3 (3-0-0) Spring

A study of the mature adult and the problems that are concomitant with the aging. Careful consideration of the legislation which has a bearing on the roles for this segment of society and the roles that the student of today may predictably be assuming in his future. An opportunity is provided for working with individuals and groups in organized as well as unstructured groups. Case studies and individualized instruction are utilized. *Prerequisites:* HEc 231, HEc 232; or by permission of instructor.

HEc 390 OBSERVATION AND PARTICIPATION IN EDUCATIONAL SETTINGS

3 (2-0-2) Fall and Spring

The prospective teacher applies concepts and techniques taught in HEc 391 while observing and participating in a variety of teaching-learning situations. The student develops a perspective about the total educational process through contact with a variety of educational settings including child development centers, day care centers, all levels of the public school, vocational schools, Home Economics Extension and 4-H programs, programs for the elderly, and services for people with special needs. Characteristics of different learners are explored in terms of age and developmental levels, family settings, socio-economic, cultural, and racial background, sex, special abilities, and interests. *Prerequisites:* HEc 391, or by permission of instructor.

HEc 391 TEACHING OF HOME ECONOMICS I

3 (3-0-0) Fall and Spring

This is the first course in the home economics education sequence, the primary focus of which is the planning for the teaching of home economics content areas such as: nutrition, consumer decision-making, housing, human development and family relationships, meal management, self-understanding, clothing and textiles, personal and family management. Opportunity is provided for exploration of home economics education resource materials. Simulation and micro-teaching are utilized for the implementation of the components of daily lesson planning. Evaluation is an integral part of the course.

HEc 392 TEACHING OF HOME ECONOMICS II

3 (3-0-0) Fall and Spring

Emphasizes program and curriculum development for home economics education in schools, including selection of learning experiences related to behavioral objectives, generalizations and concepts, and the selection and development of significant resource materials for teaching home economics concepts at a variety of levels. Provides opportunity to apply management principles to the teaching task. Special attention is given to current legislation and issues impacting on the family relative to the teaching of home economics. Principles of organization of the consumer-homemaking youth group, FHA/HERO are an integral part of the course. *Prerequisites:* HEc 390 and HEc 391.

HEc 403 FLAT PATTERN DESIGN

3 (1-0-4) Fall

Flat pattern methods are used to develop the ability to create new patterns, alter commercial patterns, apply principles of fitting and to appreciate the fundamental use of grain. *Prerequisite:* HEc 301, or a grade of B in HEc 201.

HEc 404 CREATIVE DRAPING

3 (1-0-4) Spring

Draping methods are used in the creation of designs for individual construction using basic techniques, variations in basic designs, original ideas and expression of one's designs. *Prerequisite:* HEc 301, or a grade of B in HEc 201.

HEc 405 FABRICS AND FINISHES

3 (2-0-2) Spring

Relationships of fiber structure, of fabric structure and of finishing processes to fabric performance. Laboratory evaluation of performance characteristics of textile products. *Prerequisite:* HEc 305.

HEc 409 SEMINAR AND FIELD EXPERIENCE IN CLOTHING

4 (1-0-6) Fall

An approved off campus experience in a cooperative program with business establishments which merchandise textiles or apparel. The study of merchandising, interview procedure, job opportunities in the field. *Prerequisites:* HEc 302, 303, 304; or by permission of instructor.

HEc 410 DIET THERAPY

3 (2-0-2) Spring

The study of diet problems encountered at all points of the life cycle. Consideration of metabolism in disease; adapting diet to meet diseased or abnormal metabolic patterns in humans. Special diets will be examined and evaluated. *Prerequisites:* eight semester hours of Chemistry, HEc 111, six semester hours of foods, or consent of professor.

HEc 416 PRESENTATION TECHNIQUES IN HOME ECONOMICS

2 (0-0-4) Fall or Spring

Basic principles and techniques of presentation for the home economist in business. Presentations by students and evaluation of educational effectiveness of other students' and professional presentations. Use of a variety of audio-visual media. *Prerequisite:* Junior standing.

HEc 417 SURVEY OF NUTRITION

3 (2-0-2) Fall or Spring

Chemistry of nutrients, metabolism, and normal nutrition needs at various stages of the life cycle. Laboratory work related to food composition and effects of various types of preparation upon ultimate nutrient supply. Current research, food fads and fallacies and consumer protection highlighted. *Prerequisites:* Eight hours in chemistry, three hours in foods, HEc 111.

HEc 418 ADVANCED FOODS

3 (1-0-4) Spring

An extension of the principles of food preparation, incorporating an experimental approach to preparation problems. The selection and service of food for different occasions, considering the aesthetic, cultural and social significance of food. *Prerequisites:* HEc 215 and 216.

HEc 419 FIELD EXPERIENCE IN FOOD SERVICE

3 (0-0-6) Fall, Spring, or Summer

An approved practicum in the students' major area of interest in the field of food service. The students will present to the college supervisor a written summation of learning experience and knowledge gained as an outcome of the specific practicum.

HEc 421 HOUSEHOLD EQUIPMENT AND HOME MANAGEMENT

3 (2-0-2) Fall and Spring

This course is an in-depth study of theories and processes crucial to management of the home with application through laboratory experiences. Household equipment is studied and used in laboratory situations. Conservation of resources is considered.

HEc 423 INTERIOR DESIGN IN THE HOME

3 (2-0-2) Fall and Spring

Subject matter is drawn from the study of interior design. Upon completion of the course the student will be able to create a basic interior coordinating design materials and accessories, valuing the interrelationship of environment and personal taste and personality. Laboratory experience includes the professional procedure of presenting plans to clients with perspective drawings, fabrics and color collage, and floor plans. Available to all home economics majors. *No prerequisite.*

HEc 424 THE HANDICAPPED HOMEMAKER
3 (3-0-0) Spring

Students are made aware of the many problems faced by homemakers with physical handicaps such as arthritis, amputation, poor sight or blindness, limited mobility, etc. They research these conditions and simulate handicaps in order to experience some of the difficulties that arise, and study ways of coping with the disability. This will enable the students to aid persons with physical limitations to achieve more independent living.

HEc 429 FIELD EXPERIENCE IN FOOD AND EQUIPMENT

3 (0-0-6) Fall, Spring or Summer as needed

An approved practicum in the students' major area of interest in the field of consumer service. The students will present to the college supervisor a written summation of the learning experiences and knowledge gained as an outcome of the specific practicum. *Prerequisites:* HEc 111, HEc 215, HEc 216; *junior standing or by permission of instructor.*

HEc 435 TEACHING IN THE PRESCHOOL

3 (0-1-4) Fall

Participation in selected preschool milieu with provision for practicing principles of management of preschool groups. Provides for activities in art, music, literature, science, mathematics, and language experiences. Includes a weekly seminar for discussion of participation principles of preschool management, and involvement of parents. *Prerequisites:* HEc 231, HEc 232, HEc 333, HEc 335, or concurrent with HEc 333 and HEc 335. *Others upon permission of the instructor.*

HEc 436 PRE-PROFESSIONAL SEMINAR

2 (1-0-2) Fall

A seminar designed to enhance professional skills of seniors in Child and Family Services. Includes emphasis on the integration of theory and practice of helping skills. Stresses relationships between family and community resources. Includes participation in community organizations.

HEc 437 ADVANCED CHILD DEVELOPMENT

3 (3-0-0) Fall or Summer by sufficient request

Advanced study in child development with emphasis on current research and readings dealing with children. *Prerequisite:* HEc 131

HEc 438 ADVANCED FAMILY RELATIONS

3 (2-1-0) Summer by sufficient request

Individual study program combined with class seminar providing in-depth research and exploration of selected areas pertinent to a better understanding of the problems confronting today's families. Field trips as well as resource people are a part of this advanced study.

HEc 439 PROFESSIONAL SEMESTER — CHILD AND FAMILY SERVICE

12 s.h. Fall, Spring, or Summer

Pre-professional field experience for majors in the Child and Family Service Program. To be taken the last spring semester, the course consists of four parts. One week of observation in selected agency; two weeks of supervised and individual consultations in preparation for assuming participatory role. Nine weeks supervised participation as pre-professional member of an approved agency; three weeks professional seminar consisting of evaluation and such additional experiences as are needed to complete the program for entry level within the chosen professional field.

HEc 495 VOCATIONAL & CAREER EDUCATION

3 (3-0-0) Fall and Spring

Focuses on the place of home economics in vocational education, career education and occupational education. Traces the implications of federal and state vocational legislation for home economics. Provides information in regard to federal funding of vocational programs, utilizing community resources, and planning for implementing home economics oriented vocational programs. *Prerequisites:* HEc 392, or by permission of the instructor.

HEc 497 INDEPENDENT STUDY

1-3

(See page 20 for course description.)

ED 400 STUDENT TEACHING AND RELATED ACTIVITIES

12 semester hours Spring and Fall

The student teacher lives in the community and teaches in a home economics department which offers broad areas of home economics. Instruction is under the supervision of the local cooperating teacher and the college home economics education supervisor. *Prerequisite:* HEc 392.

ID 285 MODULE A: MAINSTREAMING

1

ID 285 MODULE B: READING

1-3

ID 285 MODULE C: GIFTED CHILDREN

1

(See page 54 for course description.)

ID 499 INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION

2

(See page 54 for course description.)

MATHEMATICS

MA 090 GENERAL MATHEMATICS

3 (3-0-0)

Introduction to standard topics in arithmetic and basic algebra, including whole numbers, signed numbers, fractions, radicals, decimals, percents, solving equations, graphing, sets, exponents, inequalities, formulas, functions, and word problems. Problem solving will be stressed.

MA 101 FUNDAMENTAL CONCEPTS IN MATHEMATICS

3 (3-0-0) Fall and Spring

Set notation, operation on sets, relations, properties of relations, system of integers, prime numbers, division algorithm, greatest common divisor, least common multiple, absolute value, system of rational numbers, systems of real numbers, the number line, repeating decimals and square roots. *No prerequisite.*

MA 105 INTRODUCTORY STATISTICS

3 (3-0-0) Fall and Spring

A survey of basic statistical methods for analyzing data. Topics include descriptive statistics, point estimation, linear regression, correlation, analyses of variance and covariance, interval estimation and testing of hypotheses. Laboratory, South Hall, Room 218. Actual experimental data from various sciences will be analyzed. *No prerequisite.*

MA 107 INTRODUCTION TO COMPUTER PROGRAMMING

3 (3-0-0) Fall and Spring

Fundamentals of FORTRAN programming applied to the UNIVAC SERIES 70 computer. Use of FORTRAN language to solve practical problems pertinent to science, business, and other disciplines. Laboratory includes use of a key punch and the UNIVAC SERIES 70 computer. *No prerequisite.*

MA 109 FINITE MATHEMATICS

3 (3-0-0)

An initial treatment of those topics in basic mathematics that are of special importance in the social and natural sciences. Topics included are logic, sets, and counting techniques, probability, mathematical models, linear equations and inequalities, introduction to linear programming. *Prerequisites:* Two years of college-preparatory high school mathematics or MA 130.

MA 111 FUNDAMENTAL CONCEPTS OF CALCULUS

3 (3-0-0)

A one semester course in the fundamental concepts of calculus for non-physical science majors utilizing the basic techniques of differential and integral calculus. This course is not available for students who have completed MA 140.

MA 120 MATHEMATICS OF FINANCE

3 (3-0-0)

An introduction to topics in mathematics that relate directly to the business world. Interest, discount, compound interest, annuities, amortization, sinking funds, bonds, depreciation, capitalization, perpetuities. *Prerequisite:* One year of high school algebra.

MA 125 MATHEMATICS FOR THE HEALTH SCIENCES

3 (3-0-0)

This course is designed to meet the needs of the programs in X-ray Technology and Respiratory Therapy at Robert Packer Hospital. The material covered includes elementary algebra, numerical trigonometry, a description of the system of real numbers and numeration systems.

MA 130 ALGEBRA AND TRIGONOMETRY

3 (3-0-0) Fall and Spring

Algebraic equations and inequalities, functions and graphs, polynomial functions, trigonometric functions and formulas, and exponential and logarithmic functions. *No prerequisite.*

MA 140 ANALYTIC GEOMETRY AND CALCULUS I

3 (3-0-0) Fall and Spring

The rate of change of a function, limits, derivatives of algebraic functions, applications and integration. *Prerequisite:* MA 130 or equivalent.

MA 141 ANALYTICAL GEOMETRY AND CALCULUS II

3 (3-0-0) Fall and Spring

Applications of the definite integral, transcendental functions, hyperbolic functions, methods of integration and plane analytic geometry. *Prerequisite:* MA 140.

MA 160 INTRODUCTION TO APPLIED MATHEMATICS

3 (3-0-0) Spring

Basic concepts of applications and approximations of the ideas of limit, continuity, and differentiability. Also, the standard concepts in applied mathematics such as error analysis, polynomial interpolation, and solution of linear and non-linear equations. FORTRAN IV will be introduced as an aid of investigating these areas. *Prerequisite:* MA 140.

MA 201 TOPICS IN GEOMETRY

3 (3-0-0) Spring

A study of basic concepts and structure in geometry. *Prerequisite:* MA 101 or permission of instructor.

MA 202 TOPICS IN ALGEBRA

3 (3-0-0)

A study of basic ideas and structure in algebra. Basic concepts of modern algebra include: 1) Modular arithmetics, 2) Group, ring, and field structures, and 3) Elementary number theory. *Prerequisite:* MA 101 or permission of instructor.

MA 240 ANALYTIC GEOMETRY AND CALCULUS III

3 (3-0-0) Fall and Spring

Plane analytic geometry, polar coordinates, polar equations, plane areas in polar coordinates, parametric equations and vectors, quadric surfaces and vector functions and their derivatives. *Prerequisite:* MA 141.

MA 241 ANALYTIC GEOMETRY AND CALCULUS IV

3 (3-0-0) Spring

Partial differentiation with applications, multiple integrals with applications, cylindrical and spherical coordinates, infinite series, power series, indeterminate forms, complex numbers and functions. *Prerequisite:* MA 240.

MA 260 INTRODUCTION TO ABSTRACT MATHEMATICS

3 (3-0-0) Fall

Foundations of mathematics, emphasizing fundamental concepts in abstract mathematics and deductive reasoning. Topics will include logic, sets, functions, relations, cardinality, number systems, abstract systems and topics from analysis. *Prerequisite:* MA 140.

MA 280 LINEAR ALGEBRA AND MATRIX THEORY

3 (3-0-0) Spring

An introductory study of geometric vectors and their basic properties in dimensions two and three and of matrices and their use in the theory of systems of equations. Emphasis will be placed on real vector spaces. Topics to be included are: geometry of vectors, matrix algebra and operations, solutions of general systems of linear equations, inversion of matrices, determinants, vectors and vector spaces, subspaces, linear independence, basic and dimension, linear transformations, characteristic roots and vectors and applications. *Prerequisite:* MA 141.

ED 300 TEACHING MATHEMATICS IN THE SECONDARY SCHOOL

3 (3-0-0) Spring

Consideration of the place and purpose of mathematics in secondary education; examination of curriculum problems; study of methods, techniques, and psychology in the teaching of algebra and geometry. Interpretation of the recommendations of the School Mathematics Study Group and similar committees. *Prerequisites:* MA 361 and 329 or concurrently.

MA 304 HISTORY AND PHILOSOPHY OF MATHEMATICS

3 (3-0-0) Spring

A study of the chronological development of facets of mathematics that have contemporary importance. The historical and philosophical background of each facet is integrated with experience in mathematical study and application. Emphasis is placed on great contributors of mathematics, their contributions, and their methods of reasoning. *Prerequisite:* MA 260.

MA 310 NUMERICAL ANALYSIS

3 (3-0-0) Spring, Odd-numbered years

A study of numerical methods for the solution of algebraic, transcendental and differential equations, numerical integration and differentiation, and error analysis. *Prerequisite:* MA 240, MA 107 or MA 160.

MA 311 DIFFERENTIAL EQUATIONS I

3 (3-0-0) Fall, Odd-numbered years

Ordinary differential equations, exact equations, integrating factors, differential equations of the first order and first degree, differential equations of the first order and degree higher than first, homogeneous linear differential equations with constant coefficients and applications. Laplace transforms and existence theorems. *Prerequisite:* MA 241 or concurrent enrollment.

MA 312 DIFFERENTIAL EQUATIONS II

3 (3-0-0) Spring, Even-numbered years

Series solutions to ordinary differential equations, solutions of partial differential equations and boundary value problems, Laplace transforms, and Fourier series. *Prerequisites:* MA 311 and MA 241 or concurrent enrollment.

MA 313 APPLIED PROBABILITY AND STATISTICS

3 (3-0-0)

An introduction to applications of descriptive and inferential statistics and probability. Frequency distributions, measures of location and variation, probability, expected value, and decision making, probability distributions, sampling and sampling distributions, inferences concerning means, standard deviations, and proportions, analysis of variance, non-parametric methods, regression, correlation, planning surveys and experiments. *Prerequisite:* MA 140.

MA 317 OPTIMIZATION TECHNIQUES

3 (3-0-0) Spring, Even-numbered years

A study in the theory and applications of optimization theory, particularly in linear programming. Topics to be included are: the simplex method, convex sets, elementary aspects of the theory of games, and some approximation theory. *Prerequisites:* MA 107 or MA 160, and MA 280.

MA 324 APPLIED MATHEMATICS

3 (3-0-0) Fall, Even-numbered years

A course to illustrate the principles and basic styles of thought in solving physical problems by mathematical methods. Particle dynamics, heat and fluid flow, wave equations, vector, Fourier and tensor analysis. *Prerequisites:* MA 240 and MA 280 or permission of instructor.

MA 329 MODERN GEOMETRY I

3 (3-0-0) Fall

An introduction to the foundations of geometry with emphasis on the axiomatic development of the Euclidean system. *Prerequisite:* MA 260.

MA 330 MODERN GEOMETRY II

3 (3-0-0) Spring, Odd-numbered years

The foundations of geometry with emphasis on non-Euclidean axiomatic structures. *Prerequisite:* MA 329 or by permission of instructor.

MA 335 NUMBER THEORY

3 (3-0-0) Fall, Odd-numbered years

An analytical study of basic concepts including divisibility, congruence, quadratic reciprocity and Diophantine equations. Varied methods of proof are stressed. *Prerequisites:* MA 260 and MA 141.

MA 345 REAL ANALYSIS I

3 (3-0-0) Fall, Even-numbered years

The real number system. Emphasis on the concepts and theoretical approach to calculus: functions, sequences, series, limits, continuity, derivatives, the Riemann integrals and sequences of functions. *Prerequisites:* MA 241 and MA 260.

MA 346 REAL ANALYSIS II

3 (3-0-0) Spring, Odd-numbered years

A continuation of MA 345. *Prerequisite:* MA 345.

MA 348 COMPLEX VARIABLES

3 (3-0-0) Fall, Odd-numbered years

A first course in complex variables. Complex numbers, analytic functions, elementary functions, mappings by elementary functions, integrals, power series, residues, poles, conformal mappings. *Prerequisite:* MA 241.

MA 361 MODERN ALGEBRA I

3 (3-0-0) Fall

Sets, rings, integral domains, fields, groups, polynomials, congruences, algebra of classes, mappings, homomorphisms and isomorphisms. *Prerequisite:* MA 260 or permission of instructor.

MA 362 MODERN ALGEBRA II

3 (3-0-0) Spring, Even-numbered years

A continuation of MA 321 consisting of a more detailed study of groups, rings, ideals, fields and selected topics. *Prerequisite:* MA 361.

MA 371 MATHEMATICAL STATISTICS I

3 (3-0-0) Fall, Even-numbered years

Distributions of discrete and continuous random variables, expected values and moments, conditional probability and independence, special discrete and continuous distributions. *Prerequisite:* MA 241 or concurrent enrollment.

MA 372 MATHEMATICAL STATISTICS II

3 (3-0-0) Spring, Odd-numbered years

Interval estimation, order statistics, point estimation, tests of hypotheses. *Prerequisite:* MA 371.

MA 381 TOPOLOGY

3 (3-0-0) Spring, Even-numbered years

An introductory course in point-set topology. Set theory, metric spaces, topological spaces, connectedness and compactness. *Prerequisites:* MA 141 and MA 260.

MA 401 SELECTED TOPICS IN MATHEMATICS

3 (3-0-0) Fall, Odd-numbered years

Selections from topology, Algebra, Real Analysis, Matrix Theory or other senior level topics. Active participation by the student in problem solving and theory development is required. *Prerequisite:* Permission of instructor.

MA 402 SEMINAR IN MATHEMATICS
3 (3-0-0) Fall, Even-numbered years

Papers from the American Mathematical Monthly, comparable journals and various advanced references will be presented and discussed by the students. Continuous reading and participation will be required. *Prerequisite: Permission of the instructor.*

MA 450 MATHEMATICS INTERNSHIP
3-12 (variable)

The Mathematics internship is designed to provide pre-professional skills to interested majors. Business, industry, educational or research work are examples of areas in which students can bring together academic training and practical experience.

MA 497 INDEPENDENT STUDY
(See page 20 for course description.)

MUSIC

MUS 100 INTRODUCTION TO MUSIC
3 (3-0-0)

A study of the principal musical media of the most basic musical materials with which composers have worked, and a brief survey of the most important and most popular compositions from the time of the early Baroque to the present. Designed for the non-music major.

MUS 111 BASIC MUSIC I
3 (2-2-0)

Development of vocabulary; study of modes, scales, harmonic rhythmic, and compositional techniques. Supportive examples selected from all periods of music. Sight singing and dictation.

MUS 112 BASIC MUSIC II
3 (2-2-0)

Continuation of Basic Music I. Analysis and creative projects involving Baroque practices of figured bass, functional harmony, modulation, and altered chords.

MUS 122 CLASSIC AND ROMANTIC MUSIC
2 or 3 (2-0-1)

An historical survey of Western European and Early American musical literature and musical styles of the Classic and Romantic Era.

MUS 123 POST ROMANTIC AND 20TH CENTURY MUSIC
2 or 3 (2-0-1)

An historical survey of Western European and American musical literature and musical styles beginning with the post-Romantic era through main currents of 20th century composition, and concluding with an examination of contemporary styles. *Prerequisite: MUS 122 or permission of instructor.*

MUS 131 EURHYTHMICS I
1 (0-0-2)

Laboratory experience in rhythmic movement to develop skill and greater perception of rhythms most frequently encountered. The Jacques-Dalcroze philosophy is followed.

MUS 132 EURHYTHMICS II
1 (0-0-2)

Continuation of MUS 131. Designed to develop greater sensitivity to and awareness of the nuances of dynamics and rhythm. *Prerequisite: MUS 131.*

MUS 213 BASIC MUSIC III
3 (2-2-0)

A study of more elaborate harmonic and formal structures. Examination of macro-micro elements in relation to performance practices. Creative and analysis projects based on fugue style, rondo and sonata form, and the art song.

MUS 214 BASIC MUSIC IV
3 (2-2-0)

Examination of contemporary techniques. Examples selected from Debussy to post-1950. Creative projects involving the whole tone and twelve-tone scales, also, aleatoric and electronic compositions. Sight singing and dictation to include atonal pitch sets.

MUS 222 MEDIEVAL AND RENAISSANCE MUSIC
2 or 3 (2-0-1)

An historical survey of Western European musical literature and musical styles beginning with the early Christian era through the Renaissance. *Prerequisite: MUS 122 or permission of instructor.*

MUS 223 BAROQUE MUSIC
2 or 3 (2-0-1)

An historical survey of Western European musical literature and musical styles of the Baroque Era. *Prerequisite: MUS 122 or permission of instructor.*

MUS 224 INTRODUCTION TO JAZZ

3 (3-0-0)

A study of the evolutionary history of jazz from the earliest African and European influences to the present. An emphasis will be placed on listening experiences and developing an awareness of the unique role of jazz in American culture. Open to all students.

MUS 311 ORCHESTRATION

2 (2-1-0)

Characteristics of orchestral instruments; scoring for various instrumental groups. *Prerequisite: MUS 214 or permission of instructor.*

MUS 315 ADVANCED HARMONY

3 (3-0-0)

Harmonic techniques of the late nineteenth and early twentieth centuries; interrelationship of harmonic vocabulary and musical form. *Prerequisite: MUS 214.*

MUS 316 COUNTERPOINT

3 (3-0-0)

A study of the contrapuntal style of the late 17th and early 18th centuries. *Prerequisite: MUS 214.*

MUS 321 PIANO LITERATURE I

2 (2-0-0)

A detailed study of the literature of the piano from the keyboard works of the late Renaissance through the piano works of the 18th century.

MUS 322 PIANO LITERATURE II

2 (2-0-0)

A detailed study of the literature of the piano from the 19th century to the present day.

MUS 331 CHORAL CONDUCTING

2 (2-1-0)

Designed to prepare the future music educator for the responsibilities of organizing, teaching, and conducting choral organizations of varying levels of achievement, particularly those of the junior and senior high school age groups. Actual experience in conducting the class as a choral organization is an integral part of the course. *Prerequisite: MUS 112.*

MUS 332 INSTRUMENTAL CONDUCTING

2 (2-1-0)

Preparation for conducting instrumental groups with particular emphasis on individual development of communicative and control techniques of conducting motions as well as rehearsal and performance techniques. Actual experience is provided through the conducting of a laboratory band and orchestra. Video-taping is utilized extensively with each individual. *Prerequisite: MUS 112.*

MUS 381 MUSIC IN THE ELEMENTARY SCHOOL

2 (2-0-1)

A study in teaching the elements of music through musical activities emphasizing the discovery approach. The course includes a survey of current appropriate materials and observation/participation in area elementary schools. *Prerequisite: MUS 112 and 5 Hrs. Pre-Professional Experience.*

MUS 382 MUSIC IN THE SECONDARY SCHOOL

2 (2-0-1)

A study in teaching musical concepts, knowledge, and skills in music classes and activities of the secondary school, grades 7-12, with emphasis on vocal music and general music classes. Development of a basic philosophy of music education at the secondary level. *Prerequisite: MUS 112 and 5 Hrs. Pre-Professional Experience.*

MUS 383 INSTRUMENTAL MUSIC IN PUBLIC

SCHOOLS

2 (2-0-1)

Study of a suitable instrumental program for a public school system with particular attention to the class teaching techniques of the various instruments. Problems of organization and administration of such a program; survey and examination of the available instructional material. *Prerequisite: MUS 112 and 5 Hrs. Pre-Professional Experience.*

ED 400 STUDENT TEACHING

12

Practice teaching under supervision of master teachers. Required of all students working for a degree in teacher education for certification to teach music in the public schools of Pennsylvania.

MUS 417 COMPOSITION

3 (2-1-0)

Contemporary techniques of musical composition; emphasis on creative work. *Prerequisite: MUS 214 or permission of instructor.*

MUS 418 ADVANCED COMPOSITION

3 (3-0-0)

A course in Advanced Composition for students interested in more intensive work than can be provided in Composition I. A continuation of Composition I.

MUS 421 AMERICAN MUSIC

3 (3-0-0)

The historical background and development of music in the United States from Colonial times to the present. A study of the principal composers and their music. Reading, research, and listening emphasized.

MUS 422 THE SYMPHONY

3 (3-0-0)

A study of orchestral music from its beginning. The Mannheim composers, the Viennese classics, the Romanticists and contemporary developments. Works will be analyzed and their historical, cultural, and philosophical backgrounds discussed.

MUS 423 THE CONCERTO

3 (3-0-0)

A study of the concerto form with emphasis upon the development of the form and the stylistic contributions of the great masters. Representative works will be studied in score and recordings.

MUS 424 ADVANCED MUSIC LITERATURE

3 (3-0-0)

Intensive study of selected choral, solo, chamber and orchestral masterpieces; emphasis on formal and stylistic developments.

MUS 425 CONTEMPORARY MUSIC

3 (3-0-0)

A survey of the styles, forms, and musical techniques of contemporary music.

MUS 426 WORLD MUSICS

3 (3-0-0)

A definition of the discipline of ethnomusicology, its history and objectives will be followed by a discussion of the basic descriptive and analytical procedures, bibliography, and techniques.

MUS 430 MUSIC FOR EARLY CHILDHOOD

1 (1-0-0)

An exploration and study of the ways in which music can contribute to the education of the preschool child. Musical activities and techniques will be demonstrated. Teaching materials and appropriate music literature will be examined and explored.

MUS 440 MUSIC THEATRE PRODUCTION

2 (2-0-1)

A study of the techniques necessary to direct and stage music drama in school and community; setting up a production staff, proper rehearsal methods, public relations aspects. Creating music drama from existing musical productions.

MUS 475 WOODWIND PEDAGOGY

2 (2-0-0)

A course to acquaint the students with the woodwind instruments and their solo and ensemble literature. Lecture, demonstration, films, tapes, and recordings presented for flute, oboe, bassoon, clarinet, and saxophone.

MUS 476 BRASS PEDAGOGY

2 (2-0-0)

A study of the techniques, teaching problems, teaching materials, history, and literature related to the brass instruments.

MUS 480 MUSIC WITH THE HANDICAPPED

3 (3-0-0)

An interdisciplinary approach to the use of music with the mentally retarded, the physically handicapped, and pupils having behavioral disorders, with specific focus on social and educational goals. Theories of the effects of music on behavior. Musical materials and their use. Practice in organizing and presenting projects based on these theories and materials. Varied lab experiences in music learnings. Visits and mini-participations in actual situations as a functional part of the course.

MUS 484 PIANO PEDAGOGY

2 (2-0-1)

Study of procedures for class and individual instruction; emphasis upon the ear approach as the basis for reading, true musical perception and intelligent understanding of the printed page; examination and evaluation of materials suitable for the first years of piano study. *Prerequisite: Permission of the instructor.*

MUS 485 MARCHING BAND TECHNIQUES

2 (2-0-1)

A detailed study of the marching band including philosophy, styles, charting, music, materials, instrumentation, administration, and contemporary techniques.

MUS 486 DICTION FOR SINGERS

3 (2-1-0)

A study of a systematic approach to pronunciation in solo and choral literature in English, Italian and Latin, French, and German. The International Phonetic Alphabet will be used with emphasis on those elements of pronunciation which require modification from spoken to singing language. Will include listening, class performance, and teaching experiences. Open to graduates and undergraduates.

MUS 487 SONG LITERATURE

3 (3-0-0)

The development of monophonic song from the days of the Troubadours and Trouveres to the present time. Emphasis especially upon the history of the German lied, the French chanson or melodie and solo song in the British Isles and the United States. The course will also include the major composers of song in the Slavic countries, Spain, South America and Scandinavia.

MUS 497 INDEPENDENT STUDY

(See page 20 for course description.)

APMU 011 PIANO CLASS

0 (0-0-2)

Remedial piano study for those unable to meet entrance requirements. Subject to availability of staff.

APMU 101 VOICE CLASS I

1 (0-0-2)

Development of proper vocal production, poise and confidence in solo singing. Remedial work for individual problems.

APMU 102 VOICE CLASS II

1 (0-0-2)

Continuation of Voice Class I. *Prerequisite: APMU 101.*

APMU 111 CLASS PIANO

1 (0-0-2)

For the student with limited piano skill. *Prerequisite: Fulfillment of entrance requirements for secondary piano, which consists of the ability to perform with reasonable fluency at least 5 pieces from the last pages of any standard First Grade instruction book (such as Thompson, Schaum, Fletcher, Kasschau, et al), and to play at sight pieces from the first half of a similar book.* The class size shall be limited to one person for each available keyboard. This course cannot be repeated for credit.

APMU 113 KEYBOARD SKILLS I

1 (0-0-1)

Intensive work in accompanying melodies in major and minor keys, with beginning work in modal harmony. Development of varied accompanimental styles, improvisation, command of functional harmony, "playing by ear," transposition, sight reading melodies from elementary music series, and harmonizing these melodies at sight. *Prerequisite: Basic Music II*

APMU 114 KEYBOARD SKILLS II

1 (0-0-1)

Continuation of Keyboard Skills I. More complex accompanimental styles, secondary dominant chords, improvisation, transposition, "playing by ear," modulatory techniques, sight reading from junior high music series, sight reading melodies supplying appropriate accompaniment. *Prerequisite: Keyboard Skills I or equivalent.*

APMU 130 FLUTE CLASS

1 (1/2-1/2-0)

Designed to give the fundamental principles and techniques necessary for playing and teaching the flute; study of the literature appropriate for beginning class instruction.

APMU 132 CLARINET CLASS

1 (1/2-1/2-0)

Designed to give the fundamental principles and techniques necessary for playing and teaching the clarinet; study of the literature appropriate for beginning class instruction.

APMU 133 DOUBLE REED CLASS

1 (1/2-1/2-0)

Fundamental principles and techniques for playing and teaching oboe and bassoon; making and adjusting of double reeds; study of the literature appropriate for beginning class instruction. *Prerequisite: Previous woodwind experience.*

APMU 134 ADVANCED WOODWIND CLASS

1 (0-1-0)

Instruction in woodwind instruments will be given on a level beyond that of the beginning courses. Students will be introduced to more scales, more advanced work with embouchure, tone, tonguing, in addition to suitable literature for the various instruments as reflected by the skill and advancement of the students.

APMU 135 SAXOPHONE CLASS

1 (0-1-0)

Instruction in the latest fundamentals of Saxophone performance and pedagogy. Students will have the opportunity to study all members of the saxophone family as availability of instruments permits. The course will include a survey of saxophone literature pertinent to elementary instruction.

APMU 140 TRUMPET CLASS**1 (½-½-0)**

Designed to acquaint students with the techniques of trumpet playing and teaching. Emphasis upon development of teaching ability.

APMU 141 HORN CLASS**1 (½-½-0)**

Fundamental principles and techniques of playing the horn.

APMU 142 TROMBONE CLASS**1 (½-½-0)**

Designed to acquaint students with the techniques of trombone playing and teaching. Emphasis upon development of teaching knowledge.

APMU 143 ADVANCED BRASS CLASS**1 (0-1-0)**

Instruction in Brass instruments will be given on a level beyond that of the beginning courses. Students will be introduced to scales in various articulations and ranges, more advanced technical work and styles, in addition to suitable literature for the various instruments as reflected by the skill and advancement of the students.

APMU 144 TUBA CLASS**1 (½-½-0)**

Tuba Class is designed to acquaint the student with the techniques of playing and teaching both tenor and bass tubas. The course meets for one hour each week with approximately half of the time devoted to playing and the other half devoted to teaching techniques and materials.

APMU 151 STRING CLASS I**1 (1-1-0)**

Designed to acquaint the non-string player with the basic elements of stringed instrument playing. Students learn to play the various instruments, not only learning the fundamentals of correct playing, but becoming familiar with some of the problems of class instruction found in typical elementary school string classes.

APMU 152 STRING CLASS II**1 (1-1-0)**

Continuation of String Class I. Students are expected to specialize on violin, viola, cello, or bass. Keys up to four sharps and two flats are presented with corresponding fingering problems. Bass players introduced to various positions; cello students learn extended second finger pattern. Various staccato bowing patterns introduced; violin and viola students practice simple third position exercises. Principles of vibrato presented.

APMU 153 ADVANCED STRING CLASS**1 (0-1-0)**

Instruction in stringed instruments will be given on a level beyond that of the beginning courses. Students will be introduced to scales in various positions, more advanced work with the various staccato and spiccato bowings, in addition to suitable literature for the various instruments as reflected by the skill and advancement of the students.

APMU 155 GUITAR CLASS**1 (0-1-0)**

Beginning study of the guitar. Functional use of the guitar in the music classroom. Accompanying singing.

APMU 160 PERCUSSION CLASS**1 (½-½-0)**

Study of the characteristics of the various percussion instruments; performance techniques; development of performing ability necessary to teach the percussion instruments at the elementary and secondary level of instruction.

APMU 161 ADVANCED PERCUSSION CLASS**1 (0-1-0)**

Instruction in percussion instruments will be given on a level beyond that of the beginning courses. Students will be introduced to more advanced work with the various percussion instruments in addition to suitable literature for the various instruments as reflected by the skill and advancement of the students.

APMU 200 VOICE 1**(½ hr. lesson)****APMU 300 VOICE 2****(1 hr. lesson)****APMU 210 PIANO 1****(½ hr. lesson)****APMU 310 PIANO 2****(1 hr. lesson)****APMU 211 HARPSICHORD 1****(½ hr. lesson)****APMU 311 HARPSICHORD 2****(1 hr. lesson)****APMU 220 ORGAN 1****(½ hr. lesson)****APMU 320 ORGAN 2****(1 hr. lesson)****APMU 230 FLUTE 1****(½ hr. lesson)****APMU 330 FLUTE 2****(1 hr. lesson)****APMU 231 OBOE 1****(½ hr. lesson)****APMU 331 OBOE 2****(1 hr. lesson)****APMU 232 CLARINET 1****(½ hr. lesson)****APMU 332 CLARINET 2****(1 hr. lesson)****APMU 233 BASSOON 1****(½ hr. lesson)****APMU 333 BASSOON 2****(1 hr. lesson)****APMU 234 SAXOPHONE 1****(½ hr. lesson)****APMU 334 SAXOPHONE 2****(1 hr. lesson)****APMU 240 TRUMPET 1****(½ hr. lesson)****APMU 340 TRUMPET 2****(1 hr. lesson)****APMU 241 HORN 1****(½ hr. lesson)****APMU 341 HORN 2****(1 hr. lesson)**

APMU 242 TROMBONE 1
(½ hr. lesson)

APMU 342 TROMBONE 2
(1 hr. lesson)

APMU 243 BARITONE 1
(½ hr. lesson)

APMU 343 BARITONE 2
(1 hr. lesson)

APMU 244 TUBA 1
(½ hr. lesson)

APMU 344 TUBA 2
(1 hr. lesson)

APMU 250 VIOLIN 1
(½ hr. lesson)

APMU 350 VIOLIN 2
(1 hr. lesson)

APMU 251 VIOLA 1
(½ hr. lesson)

APMU 351 VIOLA 2
(1 hr. lesson)

APMU 252 CELLO 1
(½ hr. lesson)

APMU 352 CELLO 2
(1 hr. lesson)

APMU 253 BASS 1
(½ hr. lesson)

APMU 353 BASS 2
(1 hr. lesson)

APMU 254 HARP 1
(½ hr. lesson)

APMU 260 PERCUSSION 1
(½ hr. lesson)

APMU 360 PERCUSSION 2
(1 hr. lesson)

FOR BACHELOR OF MUSIC PROGRAM ONLY:
400 Level courses available in most of the above areas.

ENMU 150 BAND 1
(*Concert Wind Ensemble*)

A highly select concert band of 48 woodwind brass and percussion players selected by audition at the beginning of each semester. In addition to presenting concerts on campus, the Wind Ensemble takes an annual three day tour.

ENMU 151 BAND II
(*Symphonic Band*)

Formed after the marching season, this band is composed of approximately 60 members selected by audition. The Symphonic Band studies a wide variety of band literature and presents concerts on campus.

ENMU 152 BAND III
(*Varsity Band*)

Formed after the marching season, this band offers an opportunity for those musicians with more limited ability to participate in a concert organization. It is open to anyone on campus without audition. A concert is given each Spring.

ENMU 153 ORCHESTRA I
(*College-Community Symphony*)

Provides an opportunity to participate in the performance of standard symphonic literature. The orchestra presents a concert each semester, accompanies outstanding student soloists, participates in the biennial choral festival, and takes a two-day tour each year.

ENMU 154 ORCHESTRA II
(*Training Orchestra*)

A string orchestra which provides orchestral training experience for non-string students who have completed two semesters of string class. It offers students string experiences which may enable them to develop their potential for use in Orchestra I, Chamber Ensembles, as a new minor, or as a new personal interest.

ENMU 156 CHORUS I
(*Concert Choir*)

A highly select choir of 48 voices. In addition to presenting a concert each semester and joining with the other choruses for an annual choral festival, the Choir takes an annual tour of two or three days.

ENMU 157 CHORUS II
(*Festival Chorus*)

A mixed chorus of sophomore, junior, and senior students providing opportunity for experience with and study of great choral literature. The Chorus presents a concert each semester and joins the other choruses for the biennial choral festival.

ENMU 158 CHORUS III
(*Freshman Chorus*)

A mixed chorus required of all Freshmen in the music education curriculum. The Chorus presents a concert each semester and joins with the other choruses for the biennial choral festival.

ENMU 160 PIANO ENSEMBLE

Study and performance of two-piano and four-hand literature, chamber music, sonatas and trios. Accompaniment of standard instrumental and vocal literature.

ENMU 161 PERCUSSION ENSEMBLE

Study and performance of representative works for all combinations of percussion instruments.

ENMU 162 OPERA WORKSHOP

Study and performance of operatic and musical comedy scenes chosen according to the abilities of the students in the workshop. Full-scale musical comedy productions done in conjunction with the Department of Speech Communication and Theatre. Students will be given the opportunity, under supervision, to perform in, musically-direct, coach, accompany, conduct, and stage-direct various scenes.

ENMU 163 WOODWIND ENSEMBLE

Study and performance of representative works for various woodwind ensembles. One woodwind quintet and one sax quartet take an annual tour.

ENMU 164 BRASS ENSEMBLE

Study and performance of representative works for various combinations of brass instruments.

ENMU 165 THE MANSFIELDIANS

A vocal chamber ensemble selected by audition to sing a lighter repertoire often in the area of jazz vocal music.

ENMU 166 CONCERT JAZZ BAND

The 23 member group performs several times each year on campus as well as taking an annual tour each year and performing concerts off-campus. Membership is by audition.

ENMU 168 STRING ENSEMBLE

Study and performance of standard literature for various types of string ensembles.

ENMU 169 CHAMBER SINGERS

A vocal chamber ensemble selected by audition to perform the specialized repertoire of the vocal chamber medium. Concerts are given at the College and off-campus by request.

MTH 370 RECREATIONAL MUSIC

2 (2-0-0)

The use of music as a recreation and diversion in hospital situations, day care centers, for home rehabilitation, as an avocation, for worthy use of leisure time either in institutional or home environments.

MTH 371 INFLUENCE OF MUSIC ON BEHAVIOR

2 (2-0-0)

Instruction and research in psychology, education, aesthetics, music and music therapy literature, to ascertain the influence of music on the physical, visceral, emotional, aesthetic, and mental well-being of individuals and groups. A study of the ways and reasons music can bring about behavior modifications.

MTH 372 MUSIC IN THERAPY

2 (2-0-0)

The use of literature, especially the *Journal of National Association for Music Therapy*, to discover and analyze how music is used in the healing process and why it has therapeutic efficacy. An in-depth study of specific musical activities that help in the rehabilitation of persons with specific disabilities.

MTH 471 THERAPY ORIENTATION

2 (2-0-0)

A study of the variety of environments in which music can be used therapeutically, from psychiatric hospitals, to private practice, and public schools. Visits to many kinds of facilities for broadening the horizon of the student.

MTH 472 PSYCHOLOGY OF MUSIC

4 (3-1-0)

The course, beginning with the physical and psychological attributes of tone, will delve into the aesthetic response and musical behavior in producing, learning, and remembering music. It will examine measurements of musical capacity, knowledge, and appreciation. A segment of the course will look into the functional uses of music. Psychological principles will be applied to teaching and each student will be given an opportunity to report on an individual topic of his choice.

MTH 475 INTERNSHIP IN MUSIC THERAPY

2

Practical experiences with the application of the theories of the uses of music in therapeutic settings. A possibility of a choice of the kind of experience available, i.e., hospital, state school, correctional facility, public school special education, private schools, private practice, may be available.

PHILOSOPHY

PHIL 201 INTRODUCTION TO PHILOSOPHY

3 (3-0-0) Fall, Spring, Summer

A discussion of the major issues which have plagued philosophers through the centuries. Beginning with the Greek ideals of Plato and Aristotle and working through the Middle Ages and Renaissance to our contemporary situation, the course will focus on questions regarding the meaning of reality, the constitution of a morally good life, the existence of God and the value of artistic expression.

PHIL 202 PHILOSOPHY AND CONTEMPORARY ISSUES

3 (3-0-0)

An analysis and clarification of philosophical presuppositions to contemporary issues. Areas of discussion will include values in a business-oriented society, bioethics, alienation, discrimination, and personal and social liberation. The aim of the course is not to force solutions on these problems but to see from a philosophical vantage point the problematics of the above areas and the logical implications of various solutions. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 220 EASTERN APPROACHES TO REALITY

3 (3-0-0) Fall or Spring, alternate years

An examination of the philosophical perspective of the Eastern mind as exhibited in Hinduism, Buddhism, Taoism, Confucianism, Islam, Zen Buddhism. The primary focus of the course is on the difference between the Eastern and Western modes of looking at the world. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 230 INTRODUCTION TO LOGIC

3 (3-0-0) Fall or Spring, alternate years

A study of the principles of deductive and inductive thinking and of experimental inference; examination of reasoning as applied in specific areas of inquiry.

PHIL 240 ETHICS

3 (3-0-0)

An examination of ethical principles and their application; analysis of problems encountered in individual and group efforts to realize moral values. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 250 AMERICAN PHILOSOPHY

3 (3-0-0) Fall or Spring, alternate years

An examination of the main schools of American philosophic thought, especially the pragmatic. The course deals with contemporary American philosophy as well as the classical figures in the field. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 270 EXISTENTIALISM

3 (3-0-0) Fall or Spring, alternate years

An analysis of contemporary philosophical trends to stress the unique in man and his value as an individual. Examination of existentialist themes will center upon freedom, commitment, self-determination, and authenticity. Emphasis will be placed upon the writings of Kierkegaard, Nietzsche, Heidegger, and Sartre. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 280 PHILOSOPHICAL PROBLEMS WITHIN WESTERN RELIGIOUS THOUGHT

3 (3-0-0) Fall or Spring, alternate years

An analysis of the validity and presuppositions of experimental and rational ways of proving the existence of God, of the faith-reason dichotomy, and of the "God is dead" movement. An examination of the logical structure of religious language. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 312 PHILOSOPHY OF SCIENCE**3 (3-0-0) Fall or Spring, alternate years**

A study of the logical grounds of scientific knowledge and of the methods of scientific discovery. Designed for the non-science student as well as the specialist, the course will focus on such concepts as theory, fact and observation in addition to the notions of scientific revolution and progress. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 303 THEORIES OF MIND AND KNOWLEDGE**3 (3-0-0) Fall or Spring, alternate years**

A study of some of the philosophical theories involved in man's understanding of his knowledge. Such concepts as belief, truth, intelligence, imagination, perception, appearance, and reality will be discussed as well as philosophical problems raised by recent theories of human behavior in psychology and the social sciences. *Prerequisite: Phil 201 or permission of the instructor.*

PHIL 302 AESTHETICS**3 (3-0-0) Fall or Spring, alternate years**

A detailed survey of both classical and modern aesthetic theories along with a criticism of each. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 315 POLITICAL AND LEGAL PHILOSOPHY**3 (3-0-0) Fall or Spring, alternate years**

A study of some of the philosophical concepts at play in recent political and legal situations, such as justice, treason, civil disobedience, revolution and violence. Attention will also be focused on the philosophy of law and the role of education in the achievement of social ends. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 385 LINGUISTIC ANALYSIS**3 (3-0-0) Fall or Spring, alternate years**

An examination of the logical structures of descriptive and non-descriptive linguistic activities. Emphasis will be placed upon the picture theory of representational language as presented in Ludwig Wittgenstein's *Tractatus Logico-Philosophicus*. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 410 TWENTIETH-CENTURY ANALYTIC PHILOSOPHY**3 (3-0-0) Fall or Spring, alternate years**

Analytic Philosophy (sometimes called linguistic philosophy), is the dominant school of philosophy today in the English speaking world. Such questions will be discussed as: Can you be sure there is a physical world; can you prove it; can you know there are minds other than yours; what kind of knowledge, if any, do the senses give us; and how does the philosopher try to dissolve problems rather than solve them.

PHIL 420 CLASSICAL GREEK PHILOSOPHY**3 (3-0-0) Fall or Spring, alternate years**

A detailed analysis of the writings of one or more of the classical Greek thinkers. Such philosophers as Plato, Aristotle, Heraclitus, Parmenides, and Plotinus will be discussed. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 421 PHILOSOPHY OF THE MIDDLE AGES**3 (3-0-0) Fall or Spring, alternate years**

An examination of the thinking of the major philosophers of the Middle Ages, especially Augustine, Aquinas, Ockham, and Duns Scotus. To acquaint the student with the main lines of philosophical thought in the Middle Ages, the course will focus on such issues as the relation between faith and reason, the existence of universals, and the proofs for God's existence.

PHIL 422 FOUNDATIONS OF MODERN PHILOSOPHY**3 (3-0-0) Fall or Spring, alternate years**

A study of the speculative thought of the early modern scientists whose investigations culminated in the development of the modern scientific mood. Hobbes, Locke, Berkeley, Hume, Descartes, Leibniz, and Spinoza — philosophers who make up the schools of rationalism and empiricism — will be discussed. Some problems dealt with are: the mind-body problem, the status of ideas, and the nature of perception. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 423 CONTEMPORARY PHILOSOPHY**3 (3-0-0) Fall or Spring, alternate years**

Analysis of the defining features of major contemporary philosophical movements, with attention primarily to logical positivism, pragmatism, and existentialism. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 490 SEMINAR IN PHILOSOPHY**1-3 (1-3-0-0)**

A supervised study into a specialized problem in philosophy or into the writings of a specific philosopher or philosophic movement. *Prerequisite: Phil 201 or permission of instructor.*

PHIL 497 INDEPENDENT STUDY**1-3**

(See page 20 for course description.)

PHYSICS

PHYS 130 HOME-MADE PHYSICS

3 (2-0-2) Fall, alternate years

Introduction to the basic concepts of physics by utilizing devices and appliances used in the home today and many of the devices that may be developed in the future.

PHYS 151 PHYSICS FOR POETS

4 (3-0-2)

An introduction to both classical and modern physics without the use of calculus. Designed to enable the student to appreciate the role of physics in society.

PHYS 152 MORE PHYSICS FOR POETS

4 (3-0-2)

Continuation of Phys. 151.

PHYS 160 PHYSICS OF MUSICAL SOUND

3 (2-0-2)

A non-mathematical approach to the physical principles involved in the generation, transmission and detection of sound.

PHYS 165 PHYSICS FOR THE ALLIED HEALTH SCIENCES

3 (2-0-2) Fall

This course is designed to give students in the Allied Health Sciences the physics background they need for their professional work. Selection of material is based on the appropriateness to the life sciences without limiting basic concepts found in all introductory physics courses.

PHYS 170 INTRODUCTION TO ELECTRONIC APPARATUS

3 (1-0-4)

Elementary principles of electrical circuits are taught in lecture and extensively applied in the laboratory by building kits (radio, meters, amplifiers, etc.) of the students' choice. Study for third and second class FCC licenses is available.

PHYS 188 GENERAL PHYSICS I

4 (3-0-3)

A three-semester calculus physics course emphasizing classical concepts. Selected topics in mechanics, heat, electrostatics, electromagnetism, waves and optics. *Prerequisite: Math 140 or taken concurrent with Phys. 188.*

PHYS 191, 192 PHYSICS I, PHYSICS II

4 (3-0-3)

A one year sequential calculus-physics course discussing classical mechanics, fluids, thermodynamics, classical electricity and magnetism, optics and waves, modern physics. Application of physics to life science is made in problem selection and laboratory experimentation. *Corequisite for Phys. 191: Calculus I. Prerequisite for Phys. 192: Phys. 191 or Phys. 188.*

PHYS 211 GENERAL PHYSICS II

4 (3-0-3)

Continuation of Phys. 188 or 191.

PHYS 250 THE RESTLESS ATMOSPHERE

3 (2-0-2)

An introduction to dynamical meteorology which includes general circulation theory, energy budget, instrumentation, weather modification. *Prerequisite: High school physics or higher or permission of instructor.*

PHYS 311 MODERN PHYSICS

3 (3-0-0)

An introduction to 20th century physics, including the structure of atoms and nuclei, basic ideas of quantum mechanics and solid state theory. *Prerequisites: Phys. 188, 211.*

PHYS 313 PHYSICAL MECHANICS I

3 (3-0-0)

An analytic treatment of classical mechanics covering the methods of statics and dynamics of rigid bodies with application to physical problems; small oscillations; generalized coordinates and Lagrange's equations. *Prerequisites: Phys. 188, Math 241 and 311.*

PHYS 314 PHYSICAL MECHANICS II

3 (3-0-0)

Continuation of Phys. 313.

PHYS 315 EXPERIMENTAL PHYSICS I

3 (1-0-4)

Experiments in electrical measurements and circuit elements, optics and atomic physics. *Prerequisite: Phys. 211.*

PHYS 316 EXPERIMENTAL PHYSICS II

3 (1-0-4)

Continuation of Phys. 315.

PHYS 317 PHYSICAL OPTICS

3 (3-0-0)

Wave phenomena, electromagnetic theory of light, interference, diffraction, polarization and nonlinear optics. *Prerequisites: Phys. 212, Math 311.*

PHYS 318 THERMODYNAMICS

3 (3-0-0)

An introduction to thermal physics and kinetic theory. *Prerequisites: Phys. 212, Math 311.*

PHYS 319 INTRODUCTION TO SOLID STATE PHYSICS

3 (3-0-0)

A brief summary of the theory underlying the behavior of solids. Emphasis on transport theory, interaction of light and matter, semiconductor devices, superconductors and lasers. *Prerequisite: Phys. 311.*

PHYS 320 ACOUSTICS

3 (2-0-2)

Fundamentals of sound waves including generation, transmission and detection of sound.

PHYS 321 SELECTED TOPICS I

3 (3-0-0)

Any selected topics not sufficiently well covered in a general course.

PHYS 322 SELECTED TOPICS II

3 (3-0-0)

Same as Phys. 321.

PHYS 333 SPACE DYNAMICS

3 (3-0-0)

Application of Newtonian mechanics to solution of actual problems in satellite trajectories and orbit; celestial mechanics and navigation. *Prerequisites: Phys. 188, Math 212.*

PHYS 334 ASTROPHYSICS

3 (3-0-0)

Application of physics and mathematics to field of astronomy. A study of stellar models, stellar evolution, radio astronomy and recent discoveries in astronomy. *Prerequisites: Phys. 311, Math 311.*

PHYS 401 ELECTRICITY AND MAGNETISM I

3 (3-0-0)

Foundations of electromagnetic theory including electrostatics, dielectric theory, magnetic properties.

PHYS 402 ELECTRICITY AND MAGNETISM II

3 (3-0-0)

Continuation of Phys. 401.

PHYS 407 INTRODUCTION TO QUANTUM MECHANICS
3 (3-0-0)

An introduction to wave mechanical and axiomatic approaches to quantum mechanics with simple application. *Prerequisites: Phys. 311, Math 311.*

PHYS 408 ATOMIC AND NUCLEAR PHYSICS
3 (3-0-0)

Continuation of Phys. 407; physical applications of quantum mechanics to atomic and nuclear physics.

PHYS 415 EXPERIMENTAL PHYSICS III
3 (3-0-6)

Research problems are assigned to the student on an individual basis.

PHYS 416 EXPERIMENTAL PHYSICS IV
3 (3-0-6)

Same as Phys. 415.

PHYS 450 CURRENT SCIENTIFIC PHENOMENA
1-3 (half-0-half) when appropriate

This course permits students to take advantage of important temporary phenomena. Thus credit hours, period and time of presentation and instructional personnel must vary. Selection of topics will be based upon intrinsic value and interest as well as importance for other courses.

POLITICAL SCIENCE

PSCI 101 AMERICAN POLITICS
3 (2-1-0)

A study of the basic organization of our national government, covering democratic principles, constitutional foundations, federalism, civil rights, the political party system, governmental branches and their functions, federal regulations and welfare services. Required for political science majors.

PSCI 202 STATE AND LOCAL POLITICS
3 (2-1-0)

An inquiry into the structure, organization of the states and their locales; such problems and issues as federalism, taxation, and intergovernmentalism are discussed.

PSCI 203 POLITICAL PARTIES AND INTEREST GROUPS
3 (1-2-0)

A study of the development and nature of the American Party System; party activities in and out of government; the interaction of political parties and interest groups; the role of interest groups in government; the nomination and electoral system.

PSCI 206 POLICY FORMATION AND IMPLEMENTATION
3 (2-1-0)

This course is concerned with what governments do, why they do it and what difference it makes. The course will focus on specific topic areas (e.g. health care, bussing, etc.) which will vary from year to year. Prime emphasis will be placed on description, analysis and explanation of the causes and consequences of governmental activity.

PSCI 210 CONTEMPORARY ISSUES IN WORLD AFFAIRS
3 (2-1-0)

Examination of twentieth-century problems of the nation-state system; power, national interest, alliances, neutralism, colonialism, regionalism, and the United Nations.

PSCI 216 POLITICAL LEADERSHIP
3 (2-1-0)

Personal, social and political sources of leadership. Styles, settings and techniques of leadership will be covered. Major emphasis will be placed on presidential leadership in the United States. However, comparisons will be made of styles in both eastern and western settings. Among the leaders studied will be Roosevelt, Nixon, Che, Lenin and Mao.

PSCI 235 INTRODUCTION TO POLITICAL ANALYSIS
3 (1-2-0)

This course deals with the methods of comparison and introductory political analysis as applied to political systems and individual political behavior. Examination of power, authority, leadership, decision-making, voting behavior. Examples will be drawn primarily from the American political process.

PSCI 240 PUBLIC ADMINISTRATION
3 (3-0-0) Fall and Spring

An examination of the roles and characteristics of bureaucracy in modern government. Administrative decision-making is analyzed in terms of the relationship between organizational structures and social and political environments.

PSCI 302 PRESIDENT AND CONGRESS

3 (1-2-0)

A study of the ways in which the political and governmental institutions of the Congress and Presidency have developed and the ways in which they manage their relationships with each other. Emphasis will be placed upon recent development of the branches and the areas of potential conflict and cooperation between the two. Attention will be given to political recruitment, especially to the functions of the electoral system, political parties and the mass communications media.

PSCI 304 PUBLIC OPINION AND POLITICAL BEHAVIOR

3 (1-2-0)

Analysis of the role of public opinion in the political system. The process by which political opinions are formed, communicated and influence political behavior. The design and administration of a survey to measure political opinions.

PSCI 305 URBAN POLITICS

3 (1-2-0)

An analysis of the interrelated problems of class, race and social change in urban places. Attention will be given to political organizations, minority groups and the relationships between local and national politics. Special emphasis is placed on the public policies directed toward the problems of the cities.

PSCI 310 U.S. FOREIGN POLICY

3 (2-1-0) Spring, alternate years

United States foreign policy in the period since World War II is examined with emphasis on American interest in key areas, American values in foreign policy, roles of leaders instrumental in creating and developing foreign policy objectives.

PSCI 312 MODERNIZATION AND POLITICS IN THE CONTEMPORARY WORLD

3 (2-1-0)

The political systems of Great Britain, France, West Germany and the Soviet Union will be studied and compared. Investigation of political cultures, elites, party systems and the policy-making processes, factors contributing to consensus and cleavage, problems of technological societies.

PSCI 313 COMMUNIST POLITICAL SYSTEMS

3 (2-1-0)

A comparative survey of the political systems of the USSR, China and other selected communist states. The role of ideology, the Communist Party and the intellectuals will be investigated. Attention will be given to the analysis of the political process and selected policy areas. The interaction of communist states as well as their relationships with the non-communist states in a changing international environment will be examined.

PSCI 315 SELECTED AREAS AND TOPICS IN COMPARATIVE POLITICS

3 (2-1-0)

Cross-national analysis of the political values, processes and institutions of selected groups of nation-states. In any given semester, the course will focus on one of the following areas: Asia, Sub-Saharan Africa, Latin America, Middle East, Europe. Special attention will be given to questions concerning political change and economic growth.

PSCI 321 CONSTITUTIONAL LAW

3 (1-2-0) Fall, alternate years

An inquiry into the general principles of the American constitutional system with special reference to the role of the judiciary in the interpretation, enforcement and development of the Federal constitution.

PSCI 323 CIVIL RIGHTS AND CIVIL LIBERTIES

3 (1-2-0) Spring

A study of civil rights in the American constitutional system with special reference to the role of the judiciary in the protections of individual liberties.

PSCI 331 DEVELOPMENT OF WESTERN POLITICAL THOUGHT

3 (2-1-0)

A study of fundamental problems in western political thought. Topics investigated will include sources of authority and obedience, origins and functioning of the polity, the role of law in government, relationship between state and individuals, characteristics of the good state. The core of readings consist of selections from classic works of Western political theory. *Prerequisite: Junior standing.*

PSCI 333 FOUNDATIONS OF MODERN POLITICAL THOUGHT

3 (1-2-0) Spring, alternate years

This course investigates the major political ideas of the 19th century — liberalism, conservatism, nationalism, socialism, and communism — as the foundation for 20th century ideologies, with emphasis on their analysis as attempts to solve the problems of industrial society.

PSCI 335 AMERICAN POLITICAL THOUGHT

3 (2-1-0)

An examination of the major phases of American Political Thought through the writings of selected political thinkers. Special emphasis will be given to the analysis and development of political ideas in relation to their continuing impact on political debate and action.

PSCI 342 ORGANIZATIONAL THEORIES

3 (2-1-0)

An examination of the development of varied major approaches and theories of organization and administration with special emphasis on evolving concepts about organization-administrative behavior.

PSCI 344 PERSONNEL MANAGEMENT

3 (2-1-0)

To serve as an introduction to the field of personnel administration; to delineate and encompass the field; to synthesize knowledge and experience; to point problems, issues and trends; to reflect the insights of the leading authors, researchers and practitioners; to chart sources for more extensive or specialized information; to provide potential and current practitioners with a balanced view of the subject; and, to provide novices with a stimulus for scholarship and vocational inspiration.

PSCI 345 GOVERNMENT REGULATION OF BUSINESS

3 (2-1-0)

This course will investigate the work of selected independent regulatory agencies — examining their interaction with relevant others in the political process, intent of appropriate legislation, procedures by which they operate as well as the substantive content of their decisions. Attention will be given to the issue of regulation in the public interest as interpreted by the agency and the courts and to consumer movements. Evaluation and proposals to reform the regulatory process will be considered.

PSCI 347 FINANCIAL SYSTEMS AND BUDGETARY PROCESS

3 (2-1-0)

An examination of the development of budgeting and budgetary reform from early "accountability" through "effectiveness" and "efficiency," to current "planning" and "programming" concepts. Emphasis is given to the study of the political process in budgeting, with an attempt to reconcile political rationality with management science.

PSCI 450 INTERNSHIP
1-12

The Political Science Internship is designed to give a student actual experience in the work of an agency and an understanding of the agency's position in the community. Further, the intern should become aware of the agency's philosophy and goals, the formal and informal organization of the agency, and the role of the agency in the political system.

PSCI 497 INDEPENDENT STUDY

(See page 20 for course description.)

PSYCHOLOGY

PSY 101 INTRODUCTION TO APPLICATIONS OF PSYCHOLOGY

3 (2-1-0) Fall and Spring

Designed to familiarize students with the applications of scientific psychology to human life. Emphasis is on "normal" behavior and its antecedents. The study of broad categories of human behavior through various psychological models. Students will become familiar with the models and their application to understanding human behavior.

PSY 105 PARENT-CHILD COMMUNICATION

3 (2-1-0) On demand

An applied course in the psychology of child rearing based on modern principles of behavior. Procedures will be covered for the modification of problem behaviors as well as the formation of desirable habits. Supervised projects will be used to insure a working knowledge of the techniques.

PSY 150 INTRODUCTION TO SCIENTIFIC PSYCHOLOGY

3 (2-1-0) Fall and Spring

Designed for those who expect to continue in upper division psychology courses. It prepares students for more advanced courses by providing familiarity with the broad range of facts which form the body of psychology, research strategies for fact finding, and theories of behavior which serve as an organizational framework. Required for all psychology and human relations majors.

PSY 200 SURVEY AND DATA ANALYSIS

3 (2-1-0) Fall

A survey of non-experimental methods for researching applied psychological problems. Emphasis will be upon survey and field techniques. The student will design, conduct, and prepare a major project.

PSY 201 TESTS AND MEASUREMENTS OF PSYCHOLOGY

3 (2-1-0) Spring

Delineation of measurement theory as well as actual experience with intelligence, aptitude, achievement, interest and personality tests. Theory and experience used to formulate guidelines by which to evaluate these tests as measuring devices with special attention to their applicability and limitations. *Prerequisites:* Psy. 150, Psy. 200 or permission of instructor.

PSY 210 PSYCHOLOGY OF FAMILY RELATIONS

3 (3-0-0) Fall and Spring

Basic course designed to present insights from both clinical and academic psychology through reading in such areas as the psychological dynamics of the family as a unit, parent-child interactions, the effect of developmental events on the psychology of the family. Class discussion and psychodrama will be used to illustrate these concepts. *Prerequisites:* Psy. 150 or 101.

PSY 212 HUMAN SEXUALITY

3 (3-0-0) Spring

A survey of scientific findings in the area of human sexual behavior. Besides covering the traditional areas of reproduction, topics of current interest and controversy will be included. Small group discussions will be used to facilitate an exchange of ideas. *Prerequisites:* Psy. 101 or 150 or on demand.

PSY 222 PSYCHOLOGICAL DEVELOPMENT OVER THE LIFE SPAN

2 (2-0-0)

The course will present an overview of the major age-related differences and changes in human behavior and experience, starting with the prenatal period through infancy, preschool and school aged childhood, adolescence, young adulthood, middle adulthood, and late adulthood. *Prerequisites:* Psy. 101 or 150.

PSY 230 EDUCATIONAL PSYCHOLOGY

3 (3-0-0) Fall and Spring

A study of the basic factors in the learning process, with emphasis on the application of principles of psychology to problems of learning and teaching. *Prerequisites:* Psy. 101 or 150.

PSY 250 EXPERIMENTAL DESIGN I: FUNDAMENTAL PRINCIPLES

4 (3-0-2) Fall

Will provide the student with information concerning the basic formats used in scientific investigations, the alternative types of investigatory procedures used by professional psychologists, and the ways to implement the various experimental and nonexperimental designs. It will offer an opportunity to develop general analytical skills and sharpen the ability to diagnose which type of scientific investigation should be used in any given situation. *Prerequisites:* Psy. 150 or MA 105.

PSY 251 EXPERIMENTAL DESIGN II: IMPLEMENTATION, ANALYSIS, AND REPORT WRITING

4 (3-0-2) Spring

Second analytical course required by psychology majors; involves designing, analyzing, and writing reports of the investigations they conduct. The primary emphasis is on acquiring information and skills concerned with the identification and definition of problems which would be feasible to investigate scientifically and with the issues of how to design useful experiments for the purposes of empirically testing the hypothesis set forth. Students will carry out simulated and demonstration projects. *Prerequisite:* Psy. 250.

PSY 270 PSYCHIC PHENOMENA

3 (1-1-2)

A survey and scientific analysis of the various behaviors labeled "psychic," including parapsychological, mystical, astrological, and hypnotic. The student will carry out and write up representative experiments. *Prerequisites:* Psy. 101 or 150 on demand.

PSY 290 LIFE SPAN DEVELOPMENT

3 (3-0-0) Fall

The course will be primarily a broad survey of what is presently known about the highly interactive aspects of human behavioral development: biological, psychological, and social. *Prerequisites:* Psy. 101 or 150.

PSY 291 ABNORMAL PSYCHOLOGY

2 (2-1-0) Spring

This course is designed to give students a general introduction to clinical and experimental aspects of the field of abnormal psychology. The major models of psychopathology and the causes and symptoms of abnormal thinking and behavior will be considered. *Prerequisites:* Psy. 290 or permission of instructor.

PSY 300 HELPING SKILLS I

3 (2-1-0) Fall

Considers modern theory and research in counseling psychology. The development of helping skills is viewed in historical perspective and a variety of modern helping methods are examined. Core dimensions in the helping process are emphasized. *Prerequisites:* Psy. 101 or Psy. 150 and Psy. 291 or equivalent, permission of instructor and upper division standing.

PSY 301 HELPING SKILLS II

3 (1-2-0) Spring

Considers advanced theory and applications in counseling psychology. Students are given the opportunity to develop and practice specific helping skills in the classroom. Professional ethics, methods of evaluating change achieved through the helping process, and community applications are examined. *Prerequisites:* Psy. 300.

PSY 310 SOCIAL PSYCHOLOGY

3 (2-1-1) Fall

A consideration of the individual aspects of social behavior. Initially attention will be focused on some problems in perception, thinking and motivation. The following topics will be examined: theories of cognitive consistency, theories of attitude formation and their relation to personality structure, motivational determinants of group membership and social conformity, social roles and social systems including leadership. *Prerequisites:* Psy. 101 or 150.

PSY 311 INTRODUCTION TO SMALL GROUP PROCESSES

3 (1-2-0) Spring

The course is designed to help the student survey and analyze the constructs, research and principles of application in the study of face to face groups. Using both didactic and laboratory methodologies, four major objectives are pursued. *Prerequisites:* Psy. 101 or 150.

PSY 312 DEVIANT BEHAVIOR AND SOCIAL PROCESS

3 (1-2-1) Fall

An in-depth study of the psychological theories of deviant minority behavior. Consideration will be given to such areas of deviant behavior as prostitution, homosexuality, juvenile delinquency, suicide, obesity, drug addiction, etc., and the various treatment modalities.

PSY 320 CHILD PSYCHOLOGY

3 (3-0-0) Fall

A study of how and why children develop as they do, with special emphasis on factors which will (1) help students to better understand their own development, and (2) help students to better understand parent-child and teacher-student relationships. *Prerequisites:* Psy. 101 or 150.

PSY 321 ADOLESCENT PSYCHOLOGY

3 (3-0-0) Spring

Beginning with puberty and following development through the late teens, this course stresses the importance of biologic change, athletics, dating, school, home, church, neighborhood, group loyalties and conflicts, etc., in shaping adolescent attitudes, values, and behavior. In general, the level of conceptualization is not overly demanding, and this course would likely be most rewarding to the student who is interested in contributing to, as well as gaining some insight into how the aforementioned factors will shape adolescent behavior in a rapidly changing society. *Prerequisites:* Psy. 101 or 150.

PSY 322 GERONTOLOGICAL PSYCHOLOGY

3 (2-0-2) Fall

This course is designed to give students a beginning understanding of the problems of the aged and ways in which the final stage of life may be made rewarding. Participation with older people will be included to clarify such problems as loneliness, emotional disturbance, physical and economic restrictions. *Prerequisites:* Psy. 150 or Psy. 101.

PSY 323 COGNITIVE AND MORAL DEVELOPMENT

3 (3-0-0) Fall

The primary objective is to expose students to Piagetian concepts and tasks, and to familiarize them with the important ideas, terminology, theories and data related to the development of logical thought and moral judgment. A secondary objective is to stimulate critical thinking about the issues through the exercise of in-depth analyses of a few of the primary sources that hold contrasting viewpoints and/or evidence. *Prerequisites:* Psy. 101 or 150.

PSY 330 DRUGS AND BEHAVIOR

3 (3-0-0) Summer and on demand

A comprehensive overview of drug use and abuse by individuals in American society. Major variables, pharmacological, physiological and social, are articulated through a behavioral model to provide the student with a framework for understanding drug consumption. *Prerequisites:* Psy. 101 or 150.

PSY 350 EXPERIMENTAL I: LEARNING
4 (3-0-2) Fall

Human and animal learning with special emphasis on experimental evidence and techniques. Discussion of the situational and physiological determiners of behavior, theories of motivation and emotion, and laboratory work involving techniques and problems in the study of motivation. Lecture and laboratory work. *Prerequisites:* Psy. 251 or by permission of instructor.

PSY 351 EXPERIMENTAL II, PERCEPTUAL PROCESSES
4 (3-0-2) Spring

Basic phenomena of the senses, their physiological correlates and integration in complex perceptual judgments. Lecture and laboratory work. *Prerequisites:* Psy. 251, or by permission of instructor.

PSY 410 INDUSTRIAL AND CONSUMER PSYCHOLOGY
3 (2-1-1) On demand

Problems and procedures in industrial psychology. Emphasis on motivational effects on such programs as incentive plans, worker adjustment, group participation, job security, training and supervision. Also the applications of psychology in personnel work. Includes selections, interviewing, training, and counseling of employees, job analysis, attitude surveys and rating methods. The major factors involved in consumer psychology. *Prerequisites:* Psy. 150 or 101.

PSY 430 THEORIES OF PERSONALITY
3 (2-1-0) Spring

Consideration of the major personality theories, with emphasis on Freudian and neo-psychoanalytic personality theory. Theorists such as Jung, existentialists, personality theorists and the proponents of a trait approach to personality will be discussed. Papers and discussion will concentrate on clarifying and evaluating the merits of different theories. *Prerequisites:* Psy. 101 or 150.

PSY 460 PHYSIOLOGICAL PSYCHOLOGY
4 (3-0-2) Spring

Physiological aspects of behavior with special emphasis upon neurological structure and function. Experimental evidence on which theories of psychophysiology are based will be studied. Lecture and laboratory work. *Prerequisites:* Psy. 251, or permission of instructor.

PSY 461 EXPERIMENTAL SOCIAL PSYCHOLOGY
4 (1-1-3) Spring

Critical examination of research designs and methods for the study of problems in social psychology. Experimental projects with questionnaires, scales, interviews and observation methods, and with problems of sampling and data analysis. *Prerequisites:* Psy. 101 or 150 and permission of instructor.

PSY 462 BEHAVIOR MODIFICATION
4 (3-0-2) Fall

An introduction to a variety of techniques for altering behavior based on learning principles and laboratory findings. A review of relevant literature will be supplemented by laboratory assignments comprising field studies, behavior mapping and behavior manipulations. The field studies will require data recording analysis and interpretation. *Prerequisites:* Psy. 101 or 150.

PSY 490 SENIOR SEMINAR IN HUMAN RELATIONS
3 (1-2-0) Fall

Human Relations majors are presented the formal opportunity to explore professional functions of psychologists and human service workers in related roles as well as various areas of current interest in applied psychology. *Prerequisites:* Senior standing as a Human Relations major and permission of instructor.

PSY 491 SENIOR SEMINAR IN PSYCHOLOGY
3 (1-2-0) Spring

Senior psychology majors are presented the formal opportunity to explore an area of psychology guided by research in appropriate journals. The presentation of current research and issues are primary objectives. *Prerequisites:* Senior standing as a Psychology major and permission of instructor.

PSY 495 PRE-PROFESSIONAL EXPERIENCE
3-15 (7-39 hours/week)

The pre-Professional experience in applied Psychology in varied settings is designed to provide practical experience and beginning skills to selected students majoring in Psychology or Human Relations. The experiences will focus on beginning clinical skills, community services and research work in settings appropriate to the students' interests, and professional orientation such as child guidance settings, mental hospitals, probation offices and industrial or governmental agencies under the supervision of qualified staff. This will give the student theoretical learning into practical application. *As a prerequisite the student needs the consent of the Department Chairperson. Consent will be contingent on the recommendations of the Department PreProfessional Committee. Details of application procedure, criteria for qualification, and obligations of the experience can be obtained from the Department Office.*

PSY 496 RESEARCH APPRENTICESHIP
6-15

The Research Apprenticeship is designed to provide the student with intensive experiences in empirical research under close supervision. Qualified students will become involved in ongoing research projects, working along with experienced researchers. Students will be encouraged to serve their apprenticeship at other campuses or institutional settings.

PSY 497 INDEPENDENT STUDY
(See page 20 for course description.)

PUBLIC SCHOOL NURSING

PSN 206 PUBLIC SCHOOL ORGANIZATION

2 (2-0-0)

The course provides for nurses a working knowledge of the organization, administration and functioning of the American Public School System. It includes specific studies of pupil personnel, administration, non-instructional staff, auxiliary services, the educational program.

PSN 300 PUBLIC SCHOOL NURSING

3 (3-0-0)

The course deals with special training in public school nursing as a branch of public health nursing, including historical background, the various related fields, the problems and limitations involved. Responsibilities of the school nurse and her relationship to school administrators, staff, community and others are studied. New techniques of handling children with heart disease, communicable diseases, sight and hearing problems, accident prevention, etc. are included.

PSN 301 PUBLIC HEALTH NURSING I

3 (3-0-0)

A survey of the fundamental principles and the historical background of public health work in Europe, England, and America is made. Much stress is placed on the recent movement to bring this work up-to-date in our state, and the training and procedure by which it is to be accomplished.

PSN 302 PUBLIC HEALTH NURSING II

3 (3-0-0)

This course is a continuation of Public Health Nursing I. Generalized versus specialized public health nursing service is carefully analyzed. Time is spent helping each nurse learn the need for and the proper method of conducting demonstrations and in-service educational programs needed in public health work.

PSN 303 FOUNDATIONS OF NUTRITION

3 (3-0-0)

The course is an overview of the principles of normal nutrition as they relate to therapeutic conditions in light of current developments, food habits, marketing and budgeting. The course includes: a study of food nutrients including sources, daily allowances, functions, and metabolism; nutritional needs of all age groups; programs for better nutrition; and dietary means of promoting optimum health.

PSN 304 FAMILY CASE WORK

3 (3-0-0)

The course involves a study of the processes of interviewing and making case studies of family groups. The history and sociology of the American family is used as a background for study. Lectures, reports and seminar techniques are employed.

PSN 305 PREVENTION AND CONTROL OF COMMUNICABLE DISEASES

3 (3-0-0)

The course is designed to help the school nurse gain a more comprehensive understanding of those communicable diseases which are creating current health problems in our communities. Included is a study of many communicable diseases not of local origin that might create problems in our country because of extensive travel by United States Citizens.

PSN 306 FIELD SERVICE SEMINAR

3 (3-0-0)

This course is designed to give the student a chance to visit schools, agencies and industries that employ nurses and deal with health on a community rather than an individual level. This allows the student to observe the various functions of these agencies and to discover how the public health nurse participates in agency and community planning.

PSN 307 METHODS AND MATERIALS OF HEALTH NURSING (INCLUDING AUDIO-VISUAL EDUCATION)

3 (3-0-0)

A course designed to bring into focus for the school nurse a relationship of health services available to the school child in the school, community, state and nation. Legal aspects of the school nursing situation are studied. Audio-visual education materials and techniques are stressed in light of the educational role of the school nurse.

PSN/BIO 309 EPIDEMIOLOGY

3 (2-1-0)

The study of distribution and determinants of disease and injury in populations. This provides an introduction into community health and medical problems and services. Problem solving, case-control studies, and statistical analysis is emphasized.

PSN 497 INDEPENDENT STUDY

1-3

(See page 20 for course description.)

RESPIRATORY THERAPY

RPH 101 BIOLOGY OF HUMAN SYSTEMS I

4 (4-0-0) Fall

An integrated approach to the structure and function of the human organ system.

RPH 102 BIOLOGY OF HUMAN SYSTEMS II

4 (4-0-0) Spring

Continuation of RPH 101.

RPH 201 PATHOLOGY

3 (2-0-2) Spring

Reaction of the human body to physical, chemical, and microbial injury; especially designed for students in allied health programs.

RPH 204 MICROBIOLOGY

3 (3-0-2) Fall

Elements of medical microbiology with emphasis on nosocomial infections.

RTH 101 RESPIRATORY THERAPY I

4 (Lectures plus field work) Fall

An introduction to Respiratory. Oxygen and other gases used in Respiratory Therapy are studied and discussed. Methods of supplying and transporting gases are presented with emphasis on safety. Gas pressure and flow-regulating devices are presented in theory followed by student practice in the use of these devices.

RTH 102 RESPIRATORY THERAPY II

4 (Lecture, laboratory, clinical application) Spring

Introduction to the concept of humidity and various humidifying devices used for treatment of respiratory diseases. Aerosol therapy is presented first in theory and then in practice. Aerosol generators from jet capillary to ultrasonic devices are presented with the emphasis on application in treatment of patients. The student learns to operate environmental control devices. Methods of oxygen analysis are presented and practiced. *Prerequisite: Respiratory Therapy 101.*

RTH 103 RESPIRATORY THERAPY III

4 (Lecture, laboratory, clinical practice) Fall

Instruction in cardio-pulmonary resuscitation and management of patient in such an emergency. The student learns to operate simple and complicated ventilators and their effect on patients. Methods of sterilization are taught and practiced. *Prerequisite: Respiratory Therapy 102.*

RTH 104 RESPIRATORY THERAPY IV

4 (Lectures plus field work) Fall

Students spend time in the pulmonary function laboratory learning to perform lung spirometry. They interview patients and record information related to the disease process. *Prerequisite: Respiratory Therapy 103.*

RTH 201 CLINICAL PRACTICUM

4 (All day) Summer only

During the Clinical Practicum, the student will be assigned to the Robert Packer Hospital Respiratory Therapy Department for clinical practice of the theory and procedures they have been taught in the didactic portion of the program. This will include observation of procedures, and unsupervised application after the student has proven competent in the clinical area. The student will be required to keep a written log of his/her experience during this time and submit a weekly report to the educational coordinator of the program. *Prerequisite: Respiratory Therapy 102, or equivalent.*

RTH 202 PHYSIOLOGY OF RESPIRATION

3 (3-0-3) Fall

Regulation of oxygen consumption and carbon dioxide excretion by the central nervous system. *Prerequisites: high school chemistry and algebra, or equivalent.*

RTH 203 CHEMISTRY OF GASES AND SOLUTIONS

(2-0-2) Fall and Spring

A thorough examination of Henry's Law and its relation to gas transport by the circulatory system.

RTH 204 PHARMACOLOGY

3 (3-0-0) Spring

Survey of pharmacological agents used in diagnosis and treatment of respiratory illness.

SECONDARY EDUCATION

ED 100 SCHOOLS AND SOCIETY

3 (3-0-0)

A basic resource for understanding the critical problems facing public policy in education as well as gaining reliable knowledge about the educational past.

ED 111 SEPEP I (SECONDARY EDUCATION PROFESSIONAL EXPERIENCE PROGRAM)

1 S.H.

ED 211 SEPEP II

1 S.H.

ED 311 SEPEP III

1 S.H.

ED 411 SEPEP IV

1 S.H.

A modularized course composed of experimental activities with emphasis placed on current educational theories and practices. Each student will be required to complete observation and participation experiences in educational settings.

ED 201 PERSONAL CAREER DEVELOPMENT

2 (2-0-0)

This course is designed as an overview of the world of work relevant to western society. Current theories of vocational development are explored and the student's own vocational development is investigated. Laboratory work involves the collecting, evaluating, classifying, and dispensing of occupational, educational and social information.

ED 300 SECONDARY SCHOOL METHODS

3 (2-0-2) *Fall and Spring*

Principles, materials, and methods of teaching English, speech, languages, mathematics, sciences, or social science in the secondary school; assignment to section according to subject matter. An attempt will be made to follow the schedule below *but* students should consult their advisor concerning the spring or fall offering.

English — Fall and Spring

Mathematics — Spring

Social Studies — Fall

Speech — Fall

Foreign Language — Spring

Science — Spring

ED 301 EVALUATIVE TECHNIQUES

2 (2-0-0) *Fall and Spring*

Elementary statistics, principles of test construction, selection and administration of standardized tests; emphasis on interpreting and reporting test scores; consideration of means of evaluation other than traditional paper and pencil tests.

ED 302 AUDIO-VISUAL COMMUNICATION

2 (1-0-2)

Classroom communication theory is analyzed with an emphasis on the selection, utilization, and evaluation of educational media for instruction and presentations. Operation of instructional materials is included with special attention given to practical classroom applications.

ED 305 READING IN THE CONTENT AREA

3 (3-0-0) *Fall and Spring*

An investigation of the reading process as it applies to teaching students to read Social Studies, Science, English, Math, and Health textbooks in grades 1 through 12.

ED 306 TUTORING IN THE EDUCATIONAL SYSTEM

3 (2-2-0)

Provides training in tutoring techniques for various subjects. Provides information in training, utilizing, and evaluating tutors in elementary and secondary classrooms. Student participants in supervised tutoring sessions with college students.

ED 400 STUDENT TEACHING (BY ARRANGEMENT)

12 *Fall and Spring*

An opportunity to apply the knowledge and skills acquired in professional preparation. This is accomplished by a field experience in College-established centers under the supervision of well-qualified cooperating teachers. During this period, observations and conferences are scheduled by the College supervisor who regularly visits the student during his off-campus experience. Required course for all secondary education majors.

ED 401 HISTORY AND PHILOSOPHY OF EDUCATION

3 (3-0-0) *Fall and Spring*

A foundations course in the study of professional education. Introducing the student to the social, historical, and philosophical foundations of education and the relationship that exists between the school and the society it serves.

ED 402 CONTEMPORARY ISSUES IN EDUCATION

2 (2-1-0)

Students become more aware of current educational theories and practices. Through ED 402 special programs are scheduled to orient class participants to current issues in education.

ED 420 BASIC PHOTOGRAPHY

3 (2-0-1)

A thorough introduction to the basic tools and creative techniques of black and white photography. Topics include: Operation and use of the 35 mm camera and lens, exposure, film processing, print making, composition, and design, and developing visual sensitivity.

ED 421 TELEVISION PRODUCTION

3 (2-0-1) *Fall and Spring*

This course covers the fundamentals and principles involved in the production of television programs. This includes the operation of TV equipment, production of visuals to be used in TV and the actual production of a program.

ED 422 BASIC MOTION PICTURE PHOTOGRAPHY

3 (2-0-2)

The course will examine the process of planning and production of 8mm and 16mm films as based on effective principles of cinematography. Students will plan the content for their films, select the treatment, film the subject using satisfactory techniques, edit the film, add sound, and demonstrate the use of their film for individual, small or large group, or television viewing. *Prerequisites:* Ed 420 or Ed 421 or by permission of the instructor.

ED 497 INDEPENDENT STUDY

1-3

(See page 20 for course description.)

ID 285 MODULE A: MAINSTREAMING

1

ID 285 MODULE B: READING

1-3

ID 285 MODULE C: GIFTED CHILDREN

1

(See page 54 for course description.)

SOCIOLOGY AND SOCIAL WORK

SOC 111 SOCIOLOGICAL PERSPECTIVES

3 (3-0-0) Fall and Spring

Introduction to the basic concepts, premises, and techniques involved in the scientific approach to the study of human societies. Analysis is made of selected aspects of social behavior at interpersonal, intergroup and societal levels of contemporary American Society.

SOC 121 CONTEMPORARY SOCIAL PROBLEMS

3 (3-0-0) Fall and Spring

Survey of critical social problems confronting American society today. Their salient characteristics and the factors related to their creation and maintenance are explicated. ANTH 101 or SOC 111 desirable but not required.

SOC 203 ORGANIZATIONAL BEHAVIOR

3 (3-0-0) Fall or Spring

Social dimensions of work organizations including formal and informal interaction patterns as well as belief and symbol systems. Case studies of human problems in industry and field observation of selected work situations are involved. *Prerequisite: ANTH 101 or SOC 111.*

SOC 222 SOCIOLOGICAL ASPECTS OF AGING

3 (3-0-0) Fall or Spring

A description and analysis of the sociological factors affecting the elderly and the aging process. Particular focus is placed upon the conditions of the elderly as a function of societal norms, attitudes, and values.

SOC 232 AMERICAN FAMILY SYSTEMS

3 (3-0-0) Fall or Spring

A study of the family throughout the life cycle including a brief historical overview of the family; emphasizes the life styles of contemporary families, influences of values in society upon family life and issues affecting individuals and families in their relationships. *Prerequisite: SOC 111.*

SOC 302 COMMUNITY

3 (3-0-0) Fall or Spring

Examination of various types of communities as social systems. Special attention is given to the varied ways by which the welfare function is met. Theories concerning community growth and change as well as factors affecting community integration are reviewed. *Prerequisite: SOC 111.*

SOC 303 SOCIAL RESEARCH METHODS

3 (3-0-0) Fall or Spring

Introduction to the logic and techniques of the social research process. Special attention is given to attitude and opinion surveys and evaluation research problems. *Prerequisite: SOC 111; Previous training in statistics strongly recommended.*

SOC 304 PUBLIC OPINION

3 (1-2-0) Fall, alternate years

Analysis of the role of public opinion in the political system. The process by which political opinions are formed, communicated and influence political behavior. The design and administration of a survey to measure political opinions. (PSCI 304) *Prerequisite: SOC 111.*

SOC 305 SOCIOLOGY OF RELIGION

3 (3-0-0) Fall or Spring

Analysis of the interrelationships between religion and other aspects of society particularly with reference to the problems of order and change. Consideration is given to the humanitarian ethic in American Society. *Prerequisite: SOC 111; ANTH 101 desirable.*

SOC 306 INTERRACIAL SEMINAR

3 (3-0-0) Fall or Spring

Examination of personal and institutional aspects of interracial relationships. Emphasis is placed upon participative exploration through the use of controlled observations, simulations, role playing and similar techniques.

SOC 351 POPULATION ECOLOGY

3 (3-0-0) Fall or Spring, alternate years

Studies the spatial aspects of world population numbers, densities, and qualities, emphasizing the economic and social characteristics and mobility of the world's population. (GEOG 351) *Prerequisite: SOC 111.*

SOC 430 DEVIANCE: DELINQUENCY AND CRIME

3 (3-0-0)

Exploration of community and social bases of juvenile delinquency and crime. Provides an introduction to sociological theories of deviance and the new perspectives in criminology. *Prerequisite: 6 hours in Sociology or instructor's permission.*

SA 321 FUTURISTIC SOCIETY

3 (3-0-0) Fall or Spring

Investigation of the expanding impact of scientific technological changes for the future forms of social life. The potential for reorganization of social practices, alterations in values and belief systems, and for the creation of new social problems are considered. *Prerequisite: SOC 111; SOC 121 and ANTH 101 are desirable.*

SA 340 DOCUMENTARY PHOTOGRAPHY

3 (2-0-2) Summer, Fall or Spring

Exploring social relations with the camera. The use of photographs as tools of inquiry, documentation, and as data for social analysis. Problems related to cultural features affecting visual perception and reportage are treated.

SA 350 SELECTED TOPICS SEMINAR

1-6 Fall or Spring

Review of a specialty area in Anthropology or Sociology or the study of a problem from an interdisciplinary position. Course may be repeated when topic is different. *Prerequisite: Upper division standing and consent of instructor.*

SA 412 RURAL COMMUNITY

3 (2-0-2) Fall or Spring

Intensive examination of a selected rural community. Instruction is focused on discerning patterns in social behavior and on imparting an understanding of the structure of rural life including its dominant cultural features. *Prerequisite: 6 hours in Sociology or Anthropology and/or consent of instructor; SOC 302 desirable.*

SOC 415 AMERICAN VALUES IN CONFLICT

3 (3-0-0)

Review of the conflicting values of different social and ethnic groups, generation, and sexual orientations and their consequences for American society. The nature of values, the basic American value system, and the relationship of individual and community value positions are examined. Attention is given to the application of techniques for value study to the clarification of educational and community problems.

SA 421 URBAN SOCIETY

3 (3-0-0)

Intensive study of the social structure of urban communities. Dominant institutional features and problems of social integration and change receive primary attention. *Prerequisites: 6 hours in Sociology or Anthropology and/or consent of instructor; SOC 302 desirable.*

SA 441 ORGANIZATIONAL INTERNSHIP

6-15 Fall, Spring or Summer

Supervised and evaluated participation in the regular activities of a business, governmental agency, or social service organization. In consultation with field instructor the student is expected to prepare an analysis of the organization's role system and its real or potential areas of stress. *Prerequisite: Consent of instructor. SOC 203 strongly recommended.*

SOC 460 SOCIOLOGY OF HEALTH AND MEDICINE

3 (3-0-0)

Review of research and social issues bearing on health and medical practice in American society. Aspects covered include cross-cultural and social class comparisons; sick roles; professionalization process; hospital organization; ideological issues and public opinion.

SA 497 INDEPENDENT STUDY

1-3

(See page 20 for course description.)

SWK 101 HUMAN SERVICES

3 (3-0-0) Fall and Spring

Survey of the field of human services. Introduction to the various professional roles, delivery systems and agencies. Emergent issues, needs, and trends affecting both public and private sectors will be reviewed. Supplementary field trips to representative human service organizations are involved.

SWK 241 INTRODUCTION TO SOCIAL WORK

3 (3-0-0) Fall and Spring

Analysis of welfare activities as a social movement and of the dominant characteristics of the social welfare institution in America. Attention will be given to changing ideologies and to the professionalization of social work practice. *Prerequisites: SOC 111; SOC 121 desirable.*

SWK 449 SOCIAL WORK TECHNIQUES: CASE WORK

3 (2-1-0) Fall or Spring

Theory and principles of social case work with individuals and families. The various roles and case work delivery systems are examined. Special emphasis on developing interviewing skills is made. *Prerequisites: SWK 241; SOC 121 desirable.*

SWK 450 SOCIAL WORK TECHNIQUES: GROUP WORK

3 (2-1-0) Fall or Spring

Introduction to social group work techniques. The variety of groups and the appropriateness of various delivery systems will be studied. Direct experience in group processes is part of the course. *Prerequisites: SWK 241; SOC 121 desirable.*

SWK 451 SOCIAL PLANNING AND DIRECTED CHANGE

3 (3-0-0) Fall or Spring

Selected cases of deliberate attempts at changing community practices are systematically examined. General patterns and recurrent problems involved in societal planning are examined. *Prerequisites: Senior standing and consent of instructor.*

SWK 452 COMMUNITY ORGANIZATION

3 (2-1-0) Fall or Spring

Introduction to basic concepts and issues in Community Organization. Major emphasis is on the practical application of social change methods for social workers concerned with organizations at the grass-roots, agency and community levels for the delivery of more effective human services. *Prerequisites: SWK 241 and 451; SOC 302 desirable.*

SPANISH

SPAN. 101 INTRODUCTORY SPANISH I

3 (3-0-2) Fall and/or Spring

For students who have not previously studied Spanish. Fundamentals of grammar, intensive drill in pronunciation, comprehension and speaking. Two hours a week are required in the language lab.

SPAN. 102 INTRODUCTORY SPANISH II

3 (3-0-2) Fall and/or Spring

Continuation of Spanish 101. *Prerequisite: Span. 101 or its equivalent.* Two hours a week are required in the language lab.

SPAN. 201 INTERMEDIATE SPANISH I

3 (3-0-2) Fall and/or Spring

Intensive grammar review. Practice in comprehension and in the use of the written and spoken language. *Prerequisite: Span. 102 or its equivalent.* Two hours a week are required in the language lab.

SPAN. 202 INTERMEDIATE SPANISH II

3 (3-0-2) Fall and/or Spring

Continuation of Span. 201. *Prerequisite: Span. 201 or its equivalent.* Two hours a week are required in the language lab.

SPAN. 205 PRONUNCIATION AND PHONETICS, SPANISH

1 (1-0-1)

An analysis of Spanish phonetics with emphasis on oral drill for English-speakers seeking to acquire an authentic Spanish accent. *Prerequisite: Span. 102.*

SPAN. 210 SPANISH CONVERSATION

3 (3-0-2)

Training in oral self expression. Selected topics are assigned for each class with the purpose of encouraging students to express themselves in Spanish. May be taken concurrently with Spanish 202 with consent of instructor. (Either Span. 210 or 305 are required of all majors.)

SPAN. 211 SELECTED READINGS

3 (3-0-0)

Reading comprehension through contemporary fiction and cultural material, adapted to the student in his 4th semester of Spanish. Readings are assigned and discussed in class with emphasis on vocabulary idioms and literary style. *Prerequisites: Span. 201-202 or its equivalent.* May be taken concurrently with Span. 202 with consent of instructor.

ED. 300L THE TEACHING OF SPANISH, SECONDARY METHODS — SPANISH

3 (3-0-0) Spring

A study of the teaching of Spanish with an emphasis on the problems, methods and materials associated with language teaching. *Prerequisite: Junior standing.* Required of all Spanish majors in teaching education programs.

SPAN. 305 ADVANCED SPANISH CONVERSATION

3 (3-0-2) Spanish

A more intensive study of idiomatic Spanish and its application to current happenings. The class is conducted entirely in Spanish. May be taken concurrently with Span. 202 with consent of instructor.

SPAN. 306 THE CULTURE AND CIVILIZATION OF SPAIN

3 (3-0-0) Fall

History of the customs and institutions of Spain as considered by historians and men of letters. Emphasis will be given to the effect of history on general culture and customs of present-day Spain. *Prerequisite: Span. 202 or equivalent.*

**SPAN. 307 THE CULTURE AND CIVILIZATION OF
LATIN AMERICA
3 (3-0-0) Spring**

A study of the history, customs and politics of Latin America. Although the study involves the history and customs of several countries, emphasis is given to general characteristics; race, religion, life style, etc. *Prerequisite:* Span. 202 or equivalent. Note: A Spanish major may satisfy the requirements with either Span. 306 or Span. 307, depending on the area of greater interest.

**SPAN. 320 ADVANCED SPANISH STRUCTURE
3 (3-0-0) Fall**

Study and practical application of the structural patterns of Spanish: emphasis on syntax. *Prerequisite:* Completion of Span. 202 or its equivalent.

**SPAN. 330 SURVEY OF SPANISH LITERATURE I
3 (3-0-0) Fall**

Reading and examination of principal writers of Spain, with attention given to literature movements, historical backgrounds, style and form. Outside reading in Spanish assigned. *Prerequisite:* Span. 202 or the equivalent.

**SPAN. 331 SURVEY OF SPANISH LITERATURE II
3 (3-0-0) Spring**

Continuation of Span. 330.

**SPAN. 340 SPANISH-AMERICAN LITERATURE I
3 (3-0-0) Fall**

A study of major Spanish-American writers and literary movements, supplementary reading and reports in Spanish.

**SPAN. 341 SPANISH-AMERICAN LITERATURE II
3 (3-0-0) Spring**

Continuation of Span. 340.

**SPAN. 350 SPANISH LITERATURE IN TRANSLATION
3 (3-0-0)**

Reading and discussion of the works of major Spanish and Latin American writers in English. Period and writer will depend on student interest and availability of texts in translation. Credit will be given toward a major or minor in Spanish with the permission of chairman. Available to all students.

**SPAN. 370-380 FOREIGN STUDY
Credit arranged**

Foreign study is open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairman. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spanish 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad.

**SPAN. 400 SENIOR SEMINAR
Credit arranged**

Selected topics in Spanish and Latin American literature. Open to qualified students with senior standing or juniors by permission of instructor and advisor.

SUGGESTED TOPICS

Contemporary Latin American Fiction 1900-1950
Contemporary Latin American Fiction since 1950
Novels of the Mexican Revolution
Modern Latin American Poetry
Literature of the Exiles of the Spanish Civil War
Hispanic Women Writers
The Spanish Medieval Epic

**SPAN. 497 INDEPENDENT STUDY
(See page 20 for course description.)**

SPEECH AND THEATRE

**SPEECH 100 ORAL COMMUNICATION
3 (1-2-0)**

This course is required of all Mansfield students. Its objectives are to help the student to formulate his own ideas coherently, evaluate factual material and use sound reasoning patterns in his preparation and attempts to communicate concepts orally; to determine and select the most effective means of expressing himself in formal and informal speaking situations, to recognize effective communication situations, and be able to indicate the variables contributing to successful communication.

**SPEECH 200 ORAL INTERPRETATION
3 (1-2-0) Spring**

An introductory course into the methods and presentations of oral readings of prose, dramatic literature and poetry. Practical experience in presentation of selections will be included. The student should be able to understand and appreciate oral interpretation as the communication of the reader's impression of the author's intent in a piece of literature. *Prerequisite:* Speech 101 & Consent.

**SPEECH 201 INTRODUCTION TO MASS MEDIA
3 (2-1-0) Fall**

A course concerned with the application of modern mass media, its origin, history, theory, principles and philosophy to the areas of entertainment, instruction, and audience persuasion. Practical experience is provided in the basic media.

**SPEECH 203 VOICE AND ARTICULATION
3 (1-2-1) Fall**

A study of the basic physiology of the speech mechanism, the processes of breathing, phonation, resonance, and articulation, and phonetic analysis and transcription, recordings and evaluations of the student's speech. Attention is given to the correction of individual faults in voice and articulation habits. *Prerequisite:* Speech 101, Oral Communication & Consent Recommended for all Students.

**SPEECH 204 PUBLIC SPEAKING
3 (1-2-0) Fall**

An advanced study of the construction, preparation and delivery of the basic types of speeches and their effect in public speaking situations. *Prerequisite:* Speech 101, Oral Communication or Consent.

**SPEECH 206 FORENSICS
1 (0-0-1)**

Designed for the student interested in intercollegiate debating and forensics. The theory and practice of competitive speaking in debating, extemporaneous speaking, original oratory, interpretation and other forensic events. Spc 206 may be repeated throughout the 8 semester sequence for 1 credit per semester. *Prerequisite:* Consent of the Instructor.

**SPEECH 207 ARGUMENTATION AND DEBATE
3 (1-2-0) Fall, Alternate Years**

A study of theory, practice, history, principles, philosophy and uses of argumentation and debate situations. *Prerequisite:* Speech 101 and Consent.

**SPEECH 210 INTRODUCTION TO PUBLIC RELATIONS
3 (3-0-0) Fall**

An introductory course in the basic principles of Public Relations. Students will study the history, principles, and practice of public relations in business, education, government, and other organizations.

**ED 300 TEACHING SPEECH AND THEATRE IN THE
SECONDARY SCHOOLS**
3 (1-2-0) Spring

This course covers the objectives, status, and problems of speech education in the public schools; principles and methods of teaching Speech and Theatre units and courses; methods of developing a Speech and Theatre syllabus; the organization, direction, and presentation of the co-curricular Speech and Theatre activities. *Prerequisite: Junior Standing and consent.*

SPEECH 301 TELEVISION PROGRAM DESIGN
3 (2-0-1) Spring

A study of the theoretical and practical aspect of television program conceptualization, scripting, production, presentation, and evaluation. *Prerequisites: Speech 201 Introduction to Mass Media and consent of Instructor.*

**SPEECH 302 RADIO PRODUCTION AND
MANAGEMENT**
3 (3-0-0) Fall

A study of the theoretical and practical aspects of radio production for a variety of station formats. The course also will study station management, sales, and advertising. *Prerequisites: Speech 201 and/or permission of Instructor.*

SPEECH 305 DISCUSSION AND GROUP DYNAMICS
3 (1-2-0) Fall, Alternate Years

A study of techniques and principles of discussion and its uses in our society for the purpose of investigation and problem solving. Practice in discussions (formal and informal) and in techniques of leadership. *Prerequisite: Speech 101.*

SPEECH 307 ADVANCED ORAL INTERPRETATION
3 (1-2-0) Fall, Alternate Years

Advanced course in the analysis of prose, poetry and drama as it is performed orally. *Prerequisite: Speech 200 or Consent of Instructor.*

SPEECH 308 READERS THEATRE
3 (1-2-0) Fall, Alternate Years

A study of the techniques involved in the organization and presentation of Readers Theatre and Chamber Theatre productions. Performance, direction, and selection of materials is stressed. *Prerequisite: Speech 200 or Consent of Instructor.*

SPEECH 310 PUBLIC RELATIONS WORKSHOP
3 (3-0-0) Spring

Practical study of Public Relations. Student will plan and direct a public relations program for an on-campus organization. *Prerequisite: Sec. Ed. 420, Eng. 44, Speech 201, Speech 204.*

SPEECH 400 COMMUNICATION THEORY
3 (1-2-0) Spring

An investigation and study of theories of communicology, communication barriers, relationship between signs, symbols and the communication process. Introduction to general semantics, systems analysis, general systems theory and a study of the English language as they relate to the study of human communication.

SPEECH 401 PERSUASION
3 (1-2-0) Spring, Alternate Years

A study of the psychology of persuasion and its use in a free society. The use of propaganda and its effect on our daily living. To prepare the student to evaluate persuasive messages, to use persuasion effectively, and to appreciate the ethics of persuasion.

**SPEECH 402 WORKSHOP IN SPEECH
COMMUNICATION AND THEATRE**
3 (1-2-2)

A special two or three week concentrated summer workshop course in current techniques related to general and specific communication situations through classroom experiences provided by direct contact between experts in communications and workshop students. The course provides for innovative instructional procedures through team teaching and interdisciplinary approaches.

SPEECH 403 CRITICAL SURVEY OF PUBLIC ADDRESS
3 (2-1-0) Spring, Alternate Years

An analysis of outstanding speeches focusing on rhetorical theory and its development. The student will be able to understand and appreciate the history of oratory, rhetorical criticism, and public address.

SPEECH 405 CREATIVITY IN THE RELATED ARTS
3 (1-2-0) Summer

This course combines a philosophical approach to the creative process which dominates the related arts field with arts experiences using color, movement, sound, form and space. The student will develop an understanding of the creative process and of aesthetic principles in his environment.

**SPEECH 450 SPECIAL PROJECTS IN SPEECH &
THEATRE**
1 - 3

SPEECH 497 INDEPENDENT STUDY
(See page 20 for course description.)

THEATRE 110 INTRODUCTION TO THEATRE
3 (3-0-0) Fall & Spring

A basic approach to theatre which consists of a survey of drama and the art and craft of the theatre. This course does not include practice in applied theatre. Recommended for non-majors.

THEATRE 202 CREATIVE DRAMATICS
3 (1-2-0) Fall, Alternate Years

A study of the theories and techniques and use of creative dramatics with children and young adults. Techniques will be of value for the teacher in the school, for church and community groups with entertainment and social development included in these areas. Recommended for non-majors.

THEATRE 210 STAGECRAFT
3 (1-0-3) Fall & Spring

An introduction to the principles, procedures and techniques of theatrical production; including backstage organization and planning, construction, painting, rigging, and operation of scenic elements, and the use and operation of lighting equipment. Laboratories connected with the department's major productions encourage the student both to develop skills in the techniques of the theatre, and to see the contribution of various elements to the entire production.

THEATRE 211 THEATRE PRODUCTION WORKSHOP
1 - 4 (0-0-4) Fall & Spring

Practical experiences in theatre production techniques with emphasis in scenery construction, painting, costumes, stage properties, lighting, publicity, and shop safety practices required for all theatre majors. *Prerequisites: Theatre 210 & Consent.*

THEATRE 212 FUNDAMENTALS OF ACTING I
3 (1-0-3) Fall

A study of the basic techniques and methods of acting. This course is designed for the beginning actor and no previous acting experience is necessary. The course begins with a physical approach to the art of acting designed to help the actor concentrate on, define, and control his physical reality. A detailed unit on role analysis furnishes a point of synthesis for skills developed.

THEATRE 213 FUNDAMENTALS OF ACTING II
3 (1-0-3) Spring

An extension of Theatre 212, Fundamentals of Acting. Emphasis on scene study, rehearsal and performance techniques. Public performance is required in the final weeks of the course. *Prerequisite: ThTr. 212 & Consent.*

THEATRE 214 MAKE-UP
1 (1-0-3) Fall

Practical course design to familiarize the student with the basic principles and techniques of stage make-up. The student will become aware of the various types of make-up and how to apply it in order to enhance a dramatic characterization.

THEATRE 300 ADVANCED ACTING
3 (1-2-0) Fall

An advanced course in the methods and presentations of acting styles, from the ancient Greeks to the modern theatre. Particular emphasis will be placed on performance. *Prerequisites: ThTr. 212, 213.*

THEATRE 310 FUNDAMENTALS OF DIRECTING
3 (1-1-2) Spring

A basic approach to the principles and procedures of directing a play. Practical application through student's directing of workshop scenes and a one-act play presented to a public audience. *Prerequisites: ThTr. 210, 212, 314, & Consent.*

THEATRE 311 STAGE COSTUMING
3 (2-0-2) Spring

Study and practice in the design and execution of costumes for the stage. The idea of costume as outward, visible extension of the human body and personality will carry through consideration of historical period, characterization, and various concepts of form and style. *Prerequisite: Speech 210 or consent of instructor.*

THEATRE 312 STAGE LIGHTING
3 (1-0-3) Spring

A study of the history and basic techniques of lighting for the stage. Lighting designs and control are stressed. The student participates in lighting major productions. *Prerequisites: ThTr. 210.*

THEATRE 313 SCENE DESIGN
3 (1-1-2) Fall

Study and practice in the principles and techniques of scenic design in the modern theatre: (a) vision and imagination of the creative artist, (b) ingenuity and skills of the scenic artist, (c) knowledge and sense of the theatre and the relationship of the contribution of the scenic designer with those of the actor, director, and playwright. *Prerequisite: ThTr. 210.*

THEATRE 314 SURVEY OF THEATRE HISTORY
3 (3-0-0) Fall

A study of the development in the theatre from its primitive origins to recent movements in the 20th century.

THEATRE 410 PLAY PRODUCTION
3 - 18 (0-0-8) Summer

A summer practicum in theatre. Students may enroll for six summer sessions of 3 credit hours each. A fundamental approach to the production aspects of dramatic art. Practical application of essential aspects of play production will be stressed through student involvement in actual summer theatre productions. This course is especially recommended for those who wish the experience of total involvement in the theatre production process.

THEATRE 414 THE MUSICAL THEATRE
3 (1-1-2) Fall, Alternate Years

A study of America's most unique contribution to world theatre. The history, problems of staging, acting, and stagecraft of this great art form will be stressed. *Prerequisite: Soph. Standing.*

THEATRE 417 PLAY STRUCTURE AND ANALYSIS
3 (2-1-0) Spring

A study of dramatic literature through analysis of selected plays and their significance in the development of the dramatic form. Each play will be studied for a realization of the social and cultural conditions in which the playwright lived and worked along with an investigation into his intent and craft. *Prerequisite: ThTr. 314.*

THEATRE 418 PLAYWRITING
3 (1-1-2) Spring, Alternate Years

A study of the principles and theories of dramatic structure along with practice in writing for the stage. *Prerequisite: ThTr. 310, 314, 417 and/or Consent of Instructor.*

SPECIAL EDUCATION

SP ED 100 PRE-PROFESSIONAL EXPERIENCE

2 (2-0-0) Fall and Spring

Special Ed. orientation, observation, seminar experience required of all new students prior to declaring a major in Sp. Ed. Includes overview of the field, intro. to the handicapped through planned experiences, discussion of career requirements, field trips and observations, specialists as guest speakers, advisement seminars.

SP ED 101 INTRODUCTION TO EXCEPTIONAL CHILDREN

3 (3-0-0) Fall and Spring

Nature and needs of children who are exceptional in emotional, social, physical and intellectual development, including gifted. Career opportunities in special education, rehabilitation and related areas. Observation in special education settings. *Prerequisite: Psy 101.*

SP ED 201 MENTALLY AND PHYSICALLY HANDICAPPED

3 (3-0-0) Spring

The study of etiology, characteristics, education and management of children and adults with mental and physical handicaps. The study would be an in-depth treatment following their introduction in Sp. Ed. 101. Some examples of mental handicaps would be mental retardation, social and emotional disturbance, and learning disabilities. Physical handicaps would include such disorders as visual and hearing impairments, epilepsy, and cerebral palsy. *Prerequisite: Sp Ed 101.*

SP ED 301 CURRICULUM ADJUSTMENTS FOR EXCEPTIONAL CHILDREN

3 (3-0-0) Fall

Study of philosophy, curriculum adjustments, methods, and materials in special education. Considers goals, school organization, grouping, planning, unit instruction, teaching-learning process, evaluating pupil progress and parent and other agency relationships. *Prerequisite: Sp Ed 201.*

SP ED 302 DIAGNOSTIC AND CORRECTIVE TEACHING

3 (3-0-0) Spring

Study and directed application of selected achievement and other special tests and procedures useful for diagnostic and corrective teaching of children with learning disabilities. Development of teaching procedures adjusted to individual needs or weaknesses. *Prerequisite: Sp Ed 201.*

SP ED 303 OBSERVATION AND PARTICIPATION

3 (2-0-1) Fall and Spring

Observation and participation in special education settings with seminar class discussions and conference with instructor. Considers teaching-learning process selecting, organizing, and presenting curriculum materials at different grade levels. Case study project. *Prerequisites: Sp Ed 301, Psy 230.*

SP ED 304 PRACTICAL ARTS FOR EXCEPTIONAL CHILDREN

3 (3-0-0)

Designed to acquaint the special education teacher with elementary task analysis and skill sequences in practical arts areas, with emphasis on foods, sewing, and related homemaking skills. Aids the prospective teacher of the handicapped in utilizing equipment now becoming available in special class settings. *Prerequisite: Instructor's Permission.*

SP ED 310 COMMUNICATION DISORDERS

3 (3-0-0) Fall

Introduction to the field of speech pathology and audiology with orientation toward the classroom teacher. Development of understanding of the nature of specific speech, hearing, and language disorders, recognition of these disorders and basic principles of speech correction. Students are introduced to methods of speech training appropriate for classroom teachers. *Prerequisite: Sp Ed 101.*

SP ED 320 THE MENTALLY GIFTED

3 (3-0-0) Spring

Physical, mental, emotional and social characteristics of mentally gifted children and youth. Consideration of teaching procedures, types of organization and curriculum materials for their education. Explore creative activities, guidance, evaluation of programs, and research findings. *Prerequisite: Sp Ed 101.*

SP ED 330 DISADVANTAGED CHILDREN AND YOUTH

3 (3-0-0) Fall and Spring

Introductory study of definitions, causes, characteristics and education of children and youth from disadvantaged environments. Consideration of problems in social-psychological context with implications for programs of improvement and research findings. *Prerequisite: Psy 101.*

SP ED 340 EDUCATION OF THE EMOTIONALLY DISTURBED

3 (2-1-0) Spring

Survey of behavior disorders in children and youth. Considers emotional disturbance, social conflict, perceptual difficulties, hyperactivity, and related problems. Coverage includes appropriate educational strategies and instructional materials for problem children. Observation and child study experiences included. *Prerequisites: Sp Ed 101, Psy 230.*

SP ED 341 PSYCHO-EDUCATIONAL PROCESSES FOR BEHAVIOR DISORDERS

3 (2-0-1) Fall

Extension of survey course (Sp Ed 340) on behavior disorders in children and youth. Intensive coverage of methods, materials, and research appropriate in the re-education of those with behavior disorders at the preschool, elementary and secondary levels. Includes minipracticum experience designed on individual basis by instructor. *Prerequisite: Sp Ed 340.*

SP ED 345 BEHAVIOR MODIFICATION WITH EXCEPTIONAL CHILDREN

3 (2-0-1) Fall

Study of implications of the principles of behavior theory for classroom teaching techniques, particularly with exceptional children. General and specific methods for generating, strengthening, and maintaining desirable behavior, and methods for weakening undesirable behavior will be stressed. The conditioning of both academic skills and non-academic behaviors on an individual and group basis will be stressed. Direct experience in modifying the behavior of exceptional children will be arranged. *Prerequisites: Sp Ed 201, Psy 230.*

SP ED 355 SELECTED TOPICS

3 (3-0-0) Fall

Designed for field experience or project work on selected current problems and interest areas in the field of Special Education. Covers Early Childhood Handicap, Elementary and Secondary Special Education, Low Functioning Retarded, Mentally Gifted, Emotionally Disturbed, and Learning Disabled. Students work individually with the instructor and periodically report back to the class on projects. *Prerequisite: Instructor's permission.*

SP ED 360 EXCEPTIONAL CHILDREN IN REGULAR CLASSES

3 (3-0-0) Spring

Designed to develop an understanding of the rationale and procedures for mainstreaming exceptional children. Legal and philosophical rationales are examined and current developments in mainstreaming discussed. Major mainstreaming models will be studied and problems and issues covered. *Prerequisite: Psy 230.*

SP ED 400 STUDENT TEACHING IN SPECIAL EDUCATION

12 (12-0-0) Fall and Spring

Practice teaching under supervision of master teachers. Placement will be in two different special classes as assigned by the Department. Required of all students working for a degree in teacher education.

SP ED 401 ELEMENTARY SPECIAL EDUCATION

3 (3-0-0) Fall and Spring

Concerned with organizational procedures, curriculum practices and techniques used in educating exceptional children in elementary schools. Emphasis on primary and intermediate programs. *Prerequisite: Sp Ed 303.*

SP ED 402 SECONDARY SPECIAL EDUCATION

3 (3-0-0) Fall

Study of organizational procedures, curriculum practices and methods and techniques used in educating the exceptional children in junior and senior high schools. Emphasis on pre-vocational and work-study programs. *Prerequisite: Sp Ed 303.*

SP ED 403 TEACHING THE TRAINABLE RETARDED

3 (3-0-0) Fall and Spring

Organization of special classes and school programs for severely retarded children and youth. Diagnosis and classification; development of teaching materials and techniques; community organizations and parent education. *Prerequisite: Sp Ed 303.*

SP ED 404 EARLY CHILDHOOD HANDICAP

3 (2-1-0) Spring

Study of nature, needs, and implications of handicapped children in early childhood. Considers identification, differential diagnosis, consultative services, parent education and counseling, resources agencies, educational programs, curriculum, methods and materials. Emphasis on multi-disciplinary planning and research findings. Observations and child study included. *Prerequisites: Sp Ed 101, 303; or instructor's permission.*

SP ED 410 PROFESSIONAL SEMINAR

2 (2-0-0) Fall and Spring

Considers general orientation and critiques concerned with classroom problems, study of school law, school organization and administration, and role of special education in this context.

SP ED 450 FIELD EXPERIENCE

12 (0-0-12)

Supervised field experience in a professional setting serving the handicapped.

SP ED 480-485 SPECIAL EDUCATION WORKSHOPS

1 - 6 (variable)

Special workshop seminars designed to focus on contemporary trends, topics, and problems in the field of Special Education. Usually are specifically funded projects utilizing lectures, resource speakers, team teaching, field experience, practicum, news media, and related techniques.

SP ED 490 LEARNING DISABILITIES

3 (3-0-0) Fall and Spring

Considers learning needs and problems of children with special learning disabilities in listening, thinking, speaking, reading, writing, spelling, and/or arithmetic. Discussion of definitions, etiology, diagnostic problems and research findings, emphasizing the multi-disciplinary approach. Development and evaluation of remedial procedures and materials with practical application. *Prerequisites: Psy 230, Ed 301.*

SP ED 497 INDEPENDENT STUDY

(See page 20 for course description.)

ID 285 MODULE A: MAINSTREAMING

1

ID 285 MODULE B: READING

1-3

ID 285 MODULE C: GIFTED CHILDREN

1

ID 499 INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION

2

(See page 54 for course description.)

X-RAY TECHNOLOGY

XTC 101 X-RAY TECHNOLOGY I

4 (Lectures plus field work) Fall

To provide beginning students with an overall view of radiologic technology as well as to acquaint them with the ethical principles and responsibilities involved in becoming a member of the paramedical profession.

Instruction is provided in radiographic positioning of the bones of the body with emphasis placed on the extremities and spine of the body. Subsequently, a forum for the review, informal discussion, and seminars on the quality of films produced by the student is provided.

XTC 102 X-RAY TECHNOLOGY II

4 (Lectures plus field work) Spring

To develop the knowledge and skills necessary for thorough and efficient darkroom procedure and to give the students a thorough understanding of the theory of X-ray techniques. Instruction of the more difficult radiographic positions is provided, adding to the basic principles of Radiographic Positioning I.

Emphasis is placed on the skull and organs of the chest, abdomen, and pelvis. A forum for review, informal discussion, and seminars on the quality of films produced by the students is provided. *Prerequisite: X-Ray Technology 101.*

XTC 103 X-RAY TECHNOLOGY III

4 (Lectures plus field work) Fall

To acquaint students with the most difficult radiographic positioning procedures and to give them a thorough working knowledge of the complexities of radiographic exposure factors. Emphasis is placed on maximum safety procedures to protect both personnel and patients in the use of X-rays in detecting and identifying disease processes. *Prerequisite: X-Ray Technology 102.*

XTC 104 X-RAY TECHNOLOGY IV

4 (Lectures plus field work) Spring

To acquaint students with the necessary physics, the fundamentals of radioisotope techniques and the role of the technologist in their use. The course is slanted toward the student whose training is primarily in the field of diagnostic X-ray technology, but whose subsequent employment may include duties in radiation therapy. Students are instructed in the changes that occur in disease and injury and their application to X-ray technology, permitting the technologists to handle seriously ill or injured patients more intelligently. Relative to the application of vital techniques is the instruction given to students in the maintenance of X-ray equipment, to permit detection and correction of simple difficulties. Students are given an insight into the organization, function, supervision, and financial arrangements relative to departments of radiology. *Prerequisite: X-Ray Technology 103.*

XTC 201 CLINICAL PRACTICUM

4 (All Day) Summer only

To instruct students in the use of cones, diaphragms, collimators, filters, grids, screens, and film, and the effect each has on the quality of the radiograph. More specialized instruction is provided for situations involving the role of the radiologic technologist in nursing situations and in the care given to young children. Offered in summer sessions. *Prerequisite: X-Ray Technology 102.*

XTC 203 X-RAY PHYSICS

3 (2-0-2) Fall

Properties of radiation from Roentgen tubes and radioactive isotopes and their use in medicine. *Prerequisites: X-Ray Technology 102, and high school algebra and geometry, or equivalents.*

XTC 204 CLINICAL PRACTICE AND EVALUATION

6 (Lecture, laboratory, clinical practice.) Spring

An evaluation of the X-Ray students' clinical performance will be made during the final six months of their training. Registered staff technicians and radiologists, whom the students have been working with throughout the training period will evaluate the students' practical application of the knowledge acquired didactically during the prior 18 months of training. This will include professional ethics and manner, radiographic positioning, technical processing, and nursing procedures. Each student will turn in a monthly record of procedures performed which will be evaluated by the director of the training program.

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Sheaffer, Avery Associate Professor, M.A.	Sociology & Social Work	Werner, Stanley E. Associate Professor, M.A.	Mathematics
Shick, Richard L. Professor, D.Ed.	Special Education	Wetherbee, William B. Associate Professor, M.A.	Mathematics
Sidler, Jack D. Professor, Ph.D.	Chemistry	Wilcox, Jack M. Associate Professor, M.M.	Music
Simonis, James J. M.L.S.	Director of Libraries	Wilson, Edward W. Associate Professor, M.S.	Health & Physical Education
Singh, Naunihal N.S. Professor, Ph.D.	Business, Economics, and Computer Science	Winrow, Edward J. Assistant Professor, M.A.	Health & Physical Education
*Slabey, Theodore M. Associate Professor, M.E.A.	Business, Economics, and Computer Science	Witherow, Dale A. Assistant Professor, M.F.A.	Art
Smart, James G. M.S.	Assistant Director of Residence Life	Wooley, Robert W. Associate Professor, Ph.D.	History
Smichowski, Vincent P. Professor, Ed.D.	Biology	Wunderlich, Charles E. Professor, Ph.D.	Music
Spahija, Miftar Associate Professor, Dottore in Lettere	French	Wunderlich, Joyce C. Associate Professor, M.S.	Music
Sprunger, Ronald L. Assistant Professor, M.A.	Music	Wydra, Dennis J. Associate Professor, Ed.D.	Secondary Education
Stabler, M. Louise Professor, D.Ed.	Elementary Education	Yacovissi, William A. Instructor, M.A.	Geography & Regional Planning
Stanley, Donald A. Associate Professor, M.F.A.	Music	**Zdzinski, Edwin E. Professor, Ed.D.	Music
Stearns, J. David M.A.	Dean of Admissions	Zegalia, Sharon M. Assistant Professor, M.Ed.	Health & Physical Education
*Stich, Thomas F. Professor, D.Ed.	Special Education	Zinchini, Joyce T. Assistant Professor, M.S.	Special Education
Straub, Ronald B. Assistant Professor, M.Ed.	Special Education	Zujkowski, Stanley F. Assistant Professor, M.S.	Art
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Thomas, Samuel D. Assistant Professor, M.Ed.	Art		
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*Trindell, Roger T. Professor, Ph.D.	Geography & Regional Planning		
Trowbridge, Mary Lee Assistant Professor, M.Ed.	Home Economics		
Turner, Albert M. Associate Professor, M.L.S.	Library		

* Chairperson

**Assistant Chairperson

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